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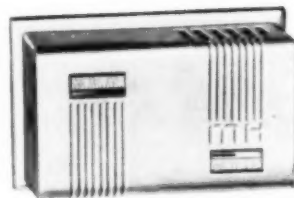
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GENERAL HOSPITAL,
Staff Quarters and
Superintendents' Houses,
upper half of illustration

TUBERCULOSIS
HOSPITAL,
(Service Buildings
not shown)
lower half of illustration



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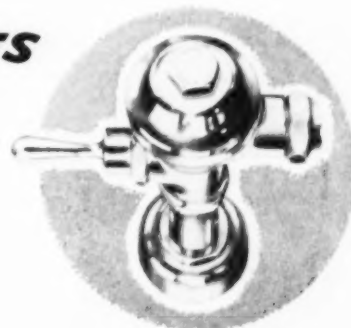
chairs and walls have handrails to aid walking. Each floor has its own dining room and many unusual features. In the General Hospital, the kitchens are located on alternate floors, with serving pantries on nonkitchen floors. When planning so vast a project it is logical that all equipment shall measure up to exacting standards. To have had its Flush Valves chosen for installation throughout these unusual buildings is a source of pride to SLOAN and another preference that explains why . . .

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Milton Fox-Martin

MILTON FOX-MARTIN, manager of the central mutual funds department in the New York office of Kidder, Peabody & Co., has for many years been an agent for the Yale Alumni Fund. A graduate of Yale in 1935, he is now serving his class as chairman of the alumni fund. On page 24 he outlines the stock gift plan being set up for the 25th anniversary of the class.

Before accepting his present position with the New York investment firm, Mr. Fox-Martin was a member of the business staff of the *New York Herald Tribune*. He is the father of six children, who, he states, "constantly remind me of the financial problems not only of universities but of parents as well."



H. R. Patton

H. R. PATTON, controller of Carnegie Institute of Technology, on page 51 gives his opinion of the safeguards that should be established in a college business office to reduce the hazards of embezzlement by members of the staff. Prior to entering college administrative work, Mr. Patton was for 11 years a member of the accounting firm of Ernst and Ernst; he was manager of the office at Wheeling, W.Va., when

he was appointed business manager and treasurer of Westminster College at New Wilmington, Pa. On July 1, 1938, he became controller of Carnegie Tech. He is a past president of the Eastern Association of College and University Business Officers and was a member of the original board of directors of the Federation of College and University Business Officer Associations. This year Mr. Patton is serving as president of the Pittsburgh Control of the Controllers Institute of America. He is the father of three daughters and two sons and proud grandfather of 11. His hobbies include wood and cabinet work in his basement power-tooled workshop, a little fishing, and, when nobody's home, playing on a German harp. Active in civic affairs, Mr. Patton finds time to be a Rotarian.



Arthur S. Adams

ARTHUR S. ADAMS, president of the American Council on Education, on page 29 voices his concern for the quality of instruction offered to college students. Before accepting appointment to his present position, Dr. Adams had for a two-year period been president of the University of New Hampshire and, in 1946-48, provost of Cornell University. During the war he was director of the training division of the navy, which brought him in close touch with colleges and universities handling navy training courses. . . . KURT M. HERTZFELD, assistant to the treasurer of the University of Rochester, Rochester, N.Y., outlines on page 42 the considerations to be kept in mind in establishing operating policy for college residence halls. He has been a member of the university staff since 1949, having been previously employed in industry with the Calvert Distilling Company, the Ford Motor Company, and Fasco Industries. . . . JAMES W. BRYANT, business manager of Texas College at Tyler, stresses the importance of developing a food cost consciousness in the operation of college dining halls. His article begins on page 49. He was resident auditor of Tuskegee Institute in Alabama before accepting his present appointment.



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Questions and Answers

Postwar Reappraisal?

Question: Since the pre-World War II price level is not apt to be restored, should not institutions give thought to a postwar reappraisal of their assets, including plant and investments, so that their balance sheets would give a clearer picture of their true financial position?—F. McL., Calif.

ANSWER: A continuing examination of financial reports of colleges and universities from all over the country has not revealed a single instance of such a reappraisal.

The National Committee on Standard Reports recommended the cost basis in its 1953 report, and in 1952 the manual committee also recommended the cost basis in its publication, "College and University Business Administration," Vol. I. Furthermore, the American Institute of Accounts has officially suggested that such a move does not seem to be wise at present. Today, colleges report their physical plant on a cost basis.

The words "should not" seem to imply a possibility of duty, with perhaps some misgivings. College financial reports are stewardship reports, not reports of net worth, equities or earnings. The plant funds section of the college financial report says that we have these control figures on our books. Most financial managers of colleges today apparently feel a duty to report the physical plant figures at cost, because they can have confidence in the approximate accuracy of such figures.

But very few of us would feel confident in adjusting such figures to a current value. Even if we were thoroughly confident of such adjustments, what would we do a few years from now after, say, a minor recession? Are we to be constantly changing our basis, and hence our valuations?

It might also be pointed out that the plant figures are not economic "cost." Few, if any, add to the capitalized cost of the building the value of the time spent by the business office

in writing up the contracts, paying the invoices, or the contracts. The time spent by the president, the deans, the physical plant superintendent, and the business manager in studying preliminary plans, for example, is not included in the control figures.

In my opinion, colleges are under social obligation to report recorded cost. On the other hand, there are too many dangers in opinions of value, too much unknown, and too many uncharted dangers to depart from the concrete facts as known. My answer to the question would be No.—HARVEY SHERER, assistant business manager, Oregon State College.

Checking Employees' Records

Question: How much checking should the past record of nonacademic employees receive before employment is authorized?—A.W., Wash.

ANSWER: There apparently have been no surveys of practices in this area, although it is a common topic of conversation among personnel people. One thing is certain—there is a wide diversity of opinion as to the value of checking past records of applicants.

Most persons will agree that a check with the most recent employer is worth while. There is also no question that further checking will sometimes

bring to light surprising, and useful, information, but the over-all costs of such checking often far exceed the actual value received.

There are a few generalizations that can be made as to how much checking of past records ought to be done. In almost every case, the past records of a candidate for a top level position should be carefully checked. Some checking needs to be done when skills and aptitudes, not easily measured by tests or performance, are important qualifications for success in the job to be filled. Institutions in metropolitan areas, particularly when they are considering the more transient type of applicant, usually find the checking of past records a matter of greater importance than do institutions in the smaller, more homogeneous communities.

The employer should be interested primarily in the applicant as he presents himself at the time he is being considered for employment. The interview, a good testing program (including a physical examination), and a plan for checking with the last employer are ordinarily the first steps in the screening process. Often no further information about the applicant is needed. If there are important gaps in the individual's employment history, or if there are unexplainable discrepancies in the information at hand, a checking of past records is in order. Again, however, such checking should ordinarily be confined to the information that seems to be needed.

The process of checking past records is most efficiently done when specific questions are asked. The "shotgun" method of asking someone to "tell you all he knows" about an individual may occasionally unearth an important item that would not have been otherwise found. Ordinarily, however, such an approach, if it yields any information at all, will not produce satisfactory results.—A. C. MARKS, director of personnel service, University of Iowa.

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.



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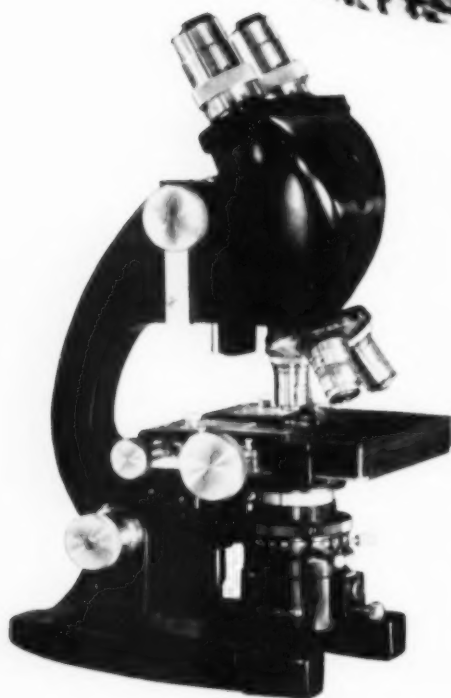
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WHERE ARE YOU GOING IN RESIDENCE HALLS COUNSELING?

CALVIN S. SIFFERD

Supervisor of Counseling
Men's Residence Halls
University of Illinois



RESIDENCE HALLS COUNSELING IS COMING OF AGE. The University of Wisconsin has a history of almost three decades of such a program. Perhaps because most other schools have a much shorter history than does Wisconsin, counseling programs in general have grown haphazardly, and those in charge of them or responsible for them often do not know just what makes the program successful or unsuccessful.

Often a residence halls counseling program is judged to be successful or unsuccessful by the degree of rest or unrest of the residents. If there has been little disturbance in the halls, if damage to physical property has been slight, if there have been few hassles between students and management, then the counseling program gets a pat on the back for having had a good year. True, a residence halls counseling program should foster good conduct, should help students to realize their obligations in group living, and should help to foster good relations between residents and management, but its worth should not be judged on these points alone. More important criteria should be the bases for judgment.

Residence halls counselors are, in a way, assistant deans in that they are interested in the over-all development of the students and are liaison agents between the students and the various campus agencies and individuals (instructors, heads of departments, deans' offices, health service, counseling bureau, religious foundations, and numerous other agencies to be found on every campus) better equipped and trained than residence halls counselors to handle many specific problems of students.

In judging the residence halls counseling program, do you know to what extent the services of the counselors are being utilized by the residents? Is each counselor receiving five calls a month from his residents, or a hundred? If the former, the chances are that one or more of several things are happening: The counselor isn't the right type of individual for the job and the residents don't go to him; he isn't making himself known to the residents; he isn't spending enough time in a spot available to the residents; he isn't prompt in dealing with problems brought to

him, or he is lacking in one or more of several important traits. These traits are understanding of the residents' problems, cooperation (or desire to be of service), friendliness, enthusiasm and interest in his work as a counselor.

Answering the following questions will also answer questions as to the worth of the counseling program: Do the halls have a responsible house government capable of and willing to handle its own internal problems, including discipline, insofar as the school administration will permit? Do the halls have a gracious, intelligent and varied social program participated in by the majority of the residents? Are the average grades of students in the halls above the average? Do the house governments work actively with management for the betterment of the halls?

That comprehensive counseling is probably the most important single factor in the total operation of a residence halls program is evidenced by a remark of a head resident: "I don't know what others think of residence halls counseling, but I wouldn't give two cents for my job without it."

Residence halls counseling can be the most important single factor in the business operation of the halls. It can help make the residence halls the most sought-after housing on campus, and without that the business operation easily can show red ink. A good counseling program develops in the residents a sense of pride in the building and a feeling of individual and group responsibility that does not tolerate either destruction of property or conduct prejudicial to the best interests of the residents. A counseling program develops in the counselors an awareness of individual and group needs, often before the need is recognized by the individual or the group itself, and thus it is possible to serve that need through other campus agencies when it seems advisable.

Residence halls counseling, with proper perspective and adequate backing at all administrative levels, with proper planning and fit leadership, can both supplement and implement the residence halls' educational, social and financial program. Residence halls counseling is indeed coming of age.

Looking Forward

Oil on Troubled Waters

THE ABRUPT AND APPARENTLY CAPRICIOUS VOTE OF no confidence by trustees of the University of Illinois in regard to President George D. Stoddard caused a furore throughout the state and in academic circles generally. There may have been some who questioned whether Dr. Stoddard's successor, Acting President Lloyd Morey, would be able to calm the troubled waters.

As the comptroller of the University of Illinois for more than 30 years, Mr. Morey has been responsible for fiscal operations of the institution. Fortunately, as a professor of accounting, he also brings to his new assignment a genuine concern for matters academic in character. His credo, as reflected in his press statement of September 1, may be considered representative of his philosophy of education as it relates to a state university:

1. To recognize that the primary obligation of the institution is to its *students* and that, without neglecting other highly important services of research and public service, competent and adequate instruction must be its first concern.
2. To obtain and hold the best *staff* possible—educational, administrative and service—and to make working conditions and facilities that are as good as resources will permit and that are conducive to maximum happiness and productivity.
3. To foster and hold the interest, confidence and support of all *alumni* and *former students*.
4. To carry out the responsibility to the *people* of the state through their elected representatives—the board of trustees, the state administration, and the general assembly—by an adequate accounting, both financial and educational.
5. To make the university a place where people of intellect and good will, even though differing in their opinions, can work together in *harmony* and mutual confidence toward the common end of its continued and permanent welfare and maximum usefulness.

This statement reveals a college or university business administrator sympathetic to the educational objectives of his institution. In such fashion is genuine leadership exercised.

Projectitis

PRESIDENT HAROLD N. DODDS OF PRINCETON UNIVERSITY met the issue of university research head on when he stated that "American universities are in danger of succumbing to projectitis if they do not keep their research projects under control."

He defined "projectitis" as an "unhappy addition to limited objectives" and warned that "concentration upon organized team projects which have limited objectives . . . may operate to deflect interest from truly basic scholarship, which it is the duty of universities to carry on. The universities must not fail in this broad function, for no other agency in society will assume it if they do."

No Conscience?

RECENT INVESTIGATION OF SLUM CONDITIONS IN Chicago revealed the ownership of a slum firetrap by the Kent College of Law. Photographs of the building showed that fire exit doors were bolted or padlocked and that glass panels in the doors had been replaced with plywood. The chief investigator for the county coroner reported that exposed electrical wiring, hanging in festoons from ceiling drop outlets, were evident throughout the building and that a fragile fire escape would not support more than two persons at a time. Walls and ceilings had been damaged by overflowing toilets and a coal burning stove had breaks in its chimney pipe, the investigator reported.

According to testimony at the coroner's meeting, the Kent College of Law rents the slum building to an individual for \$40 a month. This individual sublets the building, getting rents amounting to \$119 monthly, according to newspaper accounts.

There is something out of joint when a college administration permits the continuation of such real estate or investment practice. Have college administrators no conscience in such matters? Do many other colleges across the country hold title to property that is a fire and health hazard and an affront to human decency?

To the credit of most college executives every effort is made to dispose of slum properties that have been bequeathed to the college. If the property is to be retained, common decency requires that it quickly be improved to the extent that fire and safety hazards are removed. Preferred practice would be to refuse to accept such bequests, as being inconsistent with the objectives of the institution.

Student misbehavior that discredits an institution may be impossible to prevent or to control at the time of the incident. No such defense can be offered for the college or university that knowingly owns or operates slum properties. An outraged conscience should prevent the retention of such investments. Income produced out of the misery of the unfortunate is corrupt and has no place in a college investment portfolio.

FOR MANY YEARS MANAGEMENT HAS recognized the implications that such things as physical fitness, efficiency and morale have for production. During the last three decades there has been an increase in emphasis on these factors. This increase has been paralleled by a growth of industrial medicine that has been mostly interested in a program of treatment for job-acquired injuries and disabilities.

As time has passed more attention has been directed to the larger program of prevention and health education. The physician and nurse are now accepted components of industrial organization. They serve like all other personnel in rendering their contribution by enabling the organization to accomplish its mission of greater productivity with maximum efficiency and human satisfaction.

More recently, top executives in management have gradually become aware of the importance of the essentially interpersonal side of this picture, i.e. the part that human relations plays in accelerating or retarding the rate at which goals are reached.

Industrial relations departments were introduced during World War I and were expanded after it. As psychologists were added to their staffs, personnel departments became more impressed with the psychological approach to personnel problems. The results, however, were evidenced mainly in the direction of improved methods of selection, placement and promotion. At this point little attention was paid to the continued need of services to help keep employees happy in the job.

Perhaps too much was expected of the formal clinical psychological approach, because in providing executives with a ready-made fairy's wand that would eliminate personnel problems, the results were somewhat disappointing to the overoptimistic. Studies that might show a high degree of correlation with efficiency were continued in the quest for physical externals, such as fatigue, ventilation and lighting.

The well known experiments conducted at the Hawthorne Works of the Western Electric Company in the early 1930's made a significant contri-

From a paper read before the American Association of College Business Officers, Fort Valley State College, Ga., May 1953. It is published with the permission of the chief medical director, department of medicine and surgery, Veterans Administration, who assumes no responsibility for the opinions expressed or conclusions drawn by Dr. Barker.



THE HUMAN RELATIONS APPROACH to efficiency

PRINCE P. BARKER, M.D.

Chief, Neuropsychiatric Services
Veterans Administration Hospital, Tuskegee, Ala.

bution. These experiments indicated that efficiency correlated less with the factors of the physical environment than with the esprit de corps of the working group. Esprit de corps was found to be related to interpersonal relations, to interaction of the individuals in the group, and to group dynamics. This experiment pointed up the importance of human relations that heretofore had been largely neglected.¹

Experiences gained during and since World War II have accented emphasis in human relations. Psychological and psychiatric screening of inductees re-

sulted in more rejections for social incompetence than for physical disabilities. Many psychological disturbances arising during the constrictions of military life were found amenable to treatment, and servicemen were returned to original duty or reassignment. Industry discovered that 60 to 80 per cent of all dismissals are due to social incompetence, and only about 20 to 40 per cent to technical incompetence.²

If progress has been made in validating human relations for the lower levels of management and for the

¹The Application of Psychiatry to Industry: Report No. 20, Group for the Advancement of Psychiatry, July 1951.

²Menninger, William C.: Men, Machines, and Mental Health. National Association for Mental Health, Inc., 1790 Broadway, New York 19.

rank and file of employees, it follows that the same value approaches should be of special concern to top executives regardless of the particular organization they direct. The responsibilities of leadership require technical competence but also entail a reasonable amount of practical knowledge of people and the basic principles underlying human motivations.

One would want to know how these principles could be converted into permissive and indirect manipulation that would be beneficial to executives, subordinates and the goals of the organization. The human relations approach, if practiced with the same zeal spontaneously accorded technical competence, should effectively supplant the one-way communication (from the top down) of executive authoritarianism with deliberate techniques calculated to induce permissive communication and reactions in all directions.

An extreme case of a top executive in British television who was complimented recently with a biographical sketch in the portrait gallery of the *London Sunday Times* illustrates the unbending executive:³ "He lives on his nerves . . . he is a milder man since he lost his ulcers but he still uses a professional ruthlessness of which he is naively proud."

The honoree was quoted on his own behalf as saying: "I think I get best results by using the whip. There is no place in this job for kindness."

Co-incidentally, in the same paper a book reviewer of "The Ten Million Victims of Heinrich Himmler" characterized the modern executive in these words: "And what is the usual character of great executives in our age? Are they not often exemplary, if rather dull men, frugal, methodical valetudinarians, worried into stomach ulcers by perpetual concern to reduce overhead, increase output and diminish waste?"

How does all this apply to the executive as a college business officer? I propose to discuss his human relations (1) in reference to seeming psychopathological potentials in the operational demands of the situation; (2) in reference to personality types; and (3) to submit what is hoped will be constructive suggestions.

PSYCHOLOGICAL IMPLICATIONS

I do not pretend competency to outline the panoramic duties of a college business officer with any degree of accuracy. This does not seem to

be crucial to my discussion. The purpose is to consider chiefly the psychological implications of the situation in their broader aspects in significant detail so that they may be made available for observation, general knowledge, and inquiry.

However, I am a chief-of-service in a hospital with an operating budget of nearly nine million dollars a year and have had the opportunity over a long period of time to see at fairly close range the counterparts of the college business officer and his subordinates. The personnel has similar pressures and problems. There are differences, of course, the main one being that the college business officer provides the administrative services with equipment and supplies for education while his hospital analogue directs similar functions that enable medical personnel to treat patients. The particular materials with which they work may differ, but the process seems similar.

The extensivity of duties could well add up to a relentless frustrating situation. These are, to name a few, the conflicting pressures and demands from above, below and across in the college hierarchy; the necessity to assume the ultimate responsibility for a miscellany of operations and activities, many directly supervised and others indirectly controlled. In doing this, contradictory abilities are required. He must be simultaneously a dual personality, a specialist in some cases and a generalist in others. Occupations as a rule demand one type of intellect or the other, seldom both,⁴ with a constant interchange between the two antagonistic compartments.

As a specialist he is expected to be competent in accounting and statistics, to have the ability directly to operate large auxiliary units that serve a diversity of functions, and to function in areas that compel definite knowledge. His job requires rather specific information of all departments whether or not under his direct administrative control, *since all spend money*.

On the other hand, some of his important responsibilities call for a generalistic type of intellectual organization that will permit him to see the forest as well as the trees. Specifically, policy, long-range planning, and the trends of specific as well as overall activities must be borne in mind and equated with present or projected

budget. An outsider would judge that the demanding pressures of operational activities and otherwise logical expansion, within the limiting framework of inadequate finances, would be constantly disturbing, especially in private colleges. In even a cursory summary of administration, one cannot neglect personnel problems of coordination and control.

If the foregoing broad strokes harmonize with the canvas, if it were painted in detail, then certain conclusions are inescapable. Here is an individual who has to spread himself around and be a specialist as well as a top-policy worker and planner. This one person has the need for at least two large adjustment patterns with the potential of a polychotomous adjustment with flexible interchangeability. At best, the situation might cause this individual to underestimate or shy away from positive interpersonal relations. At worst, his environment is fraught with high anxiety provoking potentials that may manifest themselves in personal unhappiness and a low threshold for irritability with his family and fellow workers.

PSYCHOLOGICAL TYPES

I have not conducted a study of psychological types of college business officers, nor do I know what they might show if these men were given vocational interest tests, but I requested a qualified clinical psychologist who has held academic posts at several colleges to outline his profile of a successful college business officer.

He replied, to wit: tense; not overtly friendly; inclined to be stand-offish; not likely to be popular; if he satisfies president he is not likely to satisfy students and faculty; the person who gets the blame; not infrequently haggard.

The point of view of one individual out of his personal experience is interesting when compared with the findings of Dr. Robert W. McMurry, an industrial psychologist, who heads a consulting service in personnel industrial relations and market research. He appraised the effectiveness of more than 200 executives in a variety of businesses with especial reference to executive failure. In a detailed article on "The Executive Neurosis," Dr. McMurry, speaking of the hypomanic temperament, reports:⁵ "While such

³Sunday Times, London, March 8, 1953.

⁴Rucker, Peter F.: How to Be an Employee, Fortune, May 1952, p. 168.

⁵McMurry, Robert W.: The Executive Neurosis, Harvard Business Review, Nov. and Dec. 1952.

a temperament is certainly not the *une qua non* for executive success, it is found in successful executives with sufficient frequency to suggest that it is particularly advantageous."

The hypomanic temperament also is known as extroverted, extratensive and syntonik. It is a personality type that has been long known to clinical psychologists and clinical psychiatrists. The individual is inherently endowed with an apparently endless reservoir of physiological and psychic energy. This is manifested by an increase in psycho-motor output. He verbalizes freely and with spontaneity. He is reactive to people, individuals and groups. He meets them with easy effectiveness.

He is usually affirmative and calls upon inherent devices to say "no" with minimal, if any, hurt to the recipient. He seems able to ride with the punch and bounce back unimpaired. Disagreeable decisions disturb him only temporarily and take little or nothing out of his personality *per se* since his mind transfers quickly to other matters. He possesses an intuitive knowledge of people and situations that is not the result of intellectualization.

Most importantly, he has the ability to combine and manipulate diverse personalities to a common purpose. He veers away from specialized points of view to the overview. This type is perhaps never seen in pure form since human personality is a blend of component types. However, it is suggested that a successful executive should strive to attain many of these characteristics so as to preserve the maximum of internal and external harmony.

Like other personality types, the hypomanic has his limitations and disadvantages. Exaggerated variants are the perennial back-slapper and hand-shaker. The extensivity of his point of view may be superficial. Decisions may be reached without appropriate study or adequate consultation. There may be disinclination to acquire or improve real technical competence, and as a consequence he may become highly defensive.

Regardless of some handicaps there is no denying that an executive of this type could contribute by a personal instigation of a pervasive atmosphere of good interpersonal relations and the benefits stemming therefrom to his organization.

The external manifestations of behavior characteristics as outlined by a

clinical psychologist may be of any basic personality type. Much of the picture is likely to be the results of an attempt to meet the demands of the job with its many contradictions and potentials for frustration. He must square the budget with the president, the faculty, the students, and other employees. The interests of the president and some of the others may be quite different: one is interested in keeping down expenses, the other in building up his department by purchasing materials.

There is little need to amplify on this type because it contrasts broadly with the reported personality components of the successful executive. In



summary, the individual manifesting this behavior pattern to an outstanding degree wounds more easily than his opposite in human relations, reacts more in consonance with personalized reflective processes and his own internal elaboration. Disagreeable decisions are likely to "take something out" of his personality.

On the positive side, he is likely to be highly qualified educationally and technically competent. In executives, as in other people, so-called normal personality is a blend of hypomania and introversion combined in different ratios though in a given individual the usually prevailing pattern is not difficult to diagnose.

SUGGESTED CONCLUSIONS

The clinician thinks in terms of individuals more than of groups. Findings in the one are not scientifically susceptible to transference *en masse* to the other without due qualification that a group, such as this, is something different from a mere summation of the individuals who compose it. However, a trend in the direction of certain conclusions seems warranted from the foregoing discussion.

1. Experimental data of clinical psychology and the social sciences indicate a high correlation between good personal relations and efficiency. Clinical psychiatry, mental hygiene studies, and allied disciplines demonstrate that

interpersonal relations are the building blocks of personality.

The embodiment of personal contentment and good interpersonal relations, just as is good policy and planning, becomes a major responsibility of college business officers and should flow from the top downward as well as in other directions. There should be increasing recognition that there is need for permissive expression and free communication. These technics are more meaningful to efficiency than a withdrawal from interpersonal relations with the attending unhappiness and frustration.

It is better for the business officer to let his co-workers know his function, how he operates, and why they cannot be afforded the additional money for special projects. He should take time to explain a "no," since, at best, this word is a blocking and frustrating one. Whatever can be done to take away the sting will be amply rewarded in personal contentment on the part of the business manager and the employee.

2. Organizational procedures afford opportunity to project personality traits at all levels. This is of minor consequence at the bottom but of serious significance at the top where emotional prejudices and blind spots can constitute blocks to critical objective thinking. This is particularly true of a person who has the frustrating responsibility of a business officer.

3. There should be courage to self-apply technics that have been validated for lower levels. These might well include self-analysis, checking frequently with others, and a valiant effort to attain goals with a minimum of disharmony, internally as well as externally. The same point of view should be required of subordinates.

4. To the extent that his own personality varies from the purportedly advantageous type, he should deliberately take countermeasures, ranking his personality on equal terms with his technical competence. Such measures would include personal participation in formal and informal group relations, both of an intradepartmental and extradepartmental nature.

5. He should recognize that some, if not many, of the pressures that cause nervous tensions are situational and not personal. It seems to follow that he should strive for the development of a philosophic attitude that will enhance human relations as well as technical success.

Do TESTS pay off

in hiring or replacing
nonacademic personnel?

WESLEY VORDENBERG

Director, Nonacademic Personnel
Florida State University, Tallahassee



Science Research Associates Photo

THERE WAS A TIME—AND IT IS becoming increasingly hard to believe—when employees were selected on the basis of the color of the hair, shape of the head, glitter in the eye, strength of the handclasp, and appearance in general. We would like to think that such practices have been abandoned in the white heat of scientific progress.

In 1952, however, a survey of employe personnel practices in colleges and universities was conducted by the College and University Personnel Association. The survey showed that of a total of 79 universities reporting 32 used no tests at all as a part of the selection procedure. Undoubtedly, most of these universities offer courses in personnel management, procedures, and the like. Some colleges may have considered themselves too small to have set up personnel programs; others, it would appear, do not practice what they preach.

Why tests? "You can't tell by looking at a frog how far he can jump," and it is just as impossible to tell through an interview what an applicant can do. Poise, the ability (or lack of it) to speak grammatical English, and the general appearance of the applicant may be observed. The interview, however, yields no estimate of what the applicant can do. Of course, references can be checked, but it is difficult to get an accurate estimate of the applicant's ability from a

former employer about whose standards of performance we know nothing.

Furthermore, the reference blank (with terse questions and scant space for writing) seems to impede rather than implement communication. (Some personnel offices have abandoned mailing reference blanks and have substituted instead the practice of making telephone calls and of sending telegrams. The request is for information as to the applicant's ability to get along with people and similar aspects of the individual's qualifications— aspects of a person's qualifications that are difficult to ascertain by tests. Here, again, we encounter varying standards; nevertheless, the advantages of telephoning and wiring are obvious: immediate reply and freedom of expression.) Assuming, then, that tests are a valuable part of the selection process, we might ask *which* tests?

Which tests? By sifting through the various tests available, and by seeking expert advice, if needed, the personnel staff may select appropriate tests, which, to some extent, measure the skills needed in the various jobs at the university. A wide variety of tests is available; therefore, caution must be exercised to ensure the selection of tests that are *valid* and *reliable*.

TESTS PROVE HELPFUL

Some personnel offices have found that in the area of ability or aptitude

testing, the following tests are helpful (taken either in part, or in their entirety):

General Aptitude Test Battery (GATB—U.S. Government Employment Offices). For business machine operators, bookkeepers, others.

The Differential Aptitude Test Battery (Psychological Corporation). Mainly helpful for testing spelling and basic English usage.

The Clerical Aptitude Test (Science Research Associates). For general clerical aptitudes: office vocabulary, arithmetic, checking.

Basic Number Skills Test (Aptitude Associates). For bookkeepers, accountants, statisticians, and the like.

Typing Skills Test (Science Research Associates).

Dictation Skills Test (Science Research Associates).

Business Machines Card Punch Aptitude Test (IBM Corporation).

There are many others. As the tests are used, some may be discarded; others may be added until a satisfactory battery has been evolved. Some tests may be constructed locally to fill specific needs.

Local norms. It would obviously be inappropriate to compare a person applying for a position in California with people who took the test in Minnesota. The desired norms are those that allow the applicant to be compared with others from the same com-

munity. These results may then be reported in percentiles; or, if graphic presentation is simpler and clearer, the results may be shown as "above average," "average," or "below average." Further refinement in the reporting of the results depends on the test and how refined it is. This percentile method of reporting results also allows the establishment of qualifying scores—usually tempered by the local economic situation.

Reporting results to applicants. When an applicant has taken a test, he is naturally curious to know "how he did." Time, in this instance, is of the essence. The sooner he knows the results the better. Interpreting the results in a simple manner immediately after the test battery has been taken and scored satisfies the applicants and spares the personnel office the paper work of sending explanatory letters. If a person has not qualified, the interviewer may then recommend other possible leads to employment (public relations), or may suggest that the applicant return at a future date to take the tests again.

RATINGS

The administrator of the tests may be able to rate, on a simple form, his estimate of the applicant's alertness, tension, attitude (is he cooperative?), and comprehension (does he readily understand instructions?). These ratings may be compared with, and added to, those of the interviewer and a general impression may thus be arrived at from the vantage point of two independent raters.

Is the test situation a fair one? Sometimes applicants become tense when they take tests. If the physical setting has been carefully provided for, and if the test administrator is experienced and can make people feel at ease, the situation is much like one the applicant may encounter on a new job. Those who are unsure of their skills naturally dread tests most. Either their skills have not been fully developed or they have become rusty through disuse. Usually, however, applicants who are sure of their abilities have few difficulties. Actually, the testing situation differs very little from the office situation when the pressure is on.

Do tests pay off? Tests offer much of value in the selection procedure; however, the tangible evidence of their worth involves turnover. Testing spares, in many cases, both the em-

ployer and the applicant from the unpleasantness of quick termination owing to the applicant's lack of basic skills. Tests help to screen out those who have little to offer. Tests help to reduce turnover.

The cost of a testing program is relatively small when one considers the high cost of training an individual on a job. Testing helps to ensure that the person will be capable of absorbing the training and of becoming a valuable employee.

TESTING AND COUNSELING

There is another area in which tests may prove helpful. For want of a better expression, we might call this the "human relations" area. For example, an employee seems to be falling down on the job and comes voluntarily to the personnel office for help. He may be a highly skilled person, yet the job he is in is suffering for his doing it.

Tests may help to throw some light on the difficulty and may afford some insight to both the employee and the personnel officer. Perhaps a transfer to a more congenial environment is in the offing, or perhaps a referral should be made. At any rate, tests can be used effectively in a counseling situation. Furthermore, tests may be used for vocational counseling which quite often, and logically so, proceeds hand in hand with other aspects of personnel work.

SUMMARY

Perspective demands that test results be considered along with other data about the applicant. It would be just as ineffective to base all considerations and decisions on test results as it would be to use no tests at all. A good testing program, however, will constitute a sound basis for the selection process and may afford some help in counseling employees already on the job.

To be sure, tests are not the answer to all problems of employee selection and employee-employer human relations, but they *do* help. University personnel offices, located as they are, have a rare opportunity to enhance their value by utilizing university testing resources. Such a practice would seem imminently worth while, for in these days of specialization of work and tension in the world, any program that offers help in the adjustment of man to job and man to man should be worth careful consideration.

Union Operation

A Letter to the Editor

On pages 39 and 40 of the August 1953 issue of *COLLEGE AND UNIVERSITY BUSINESS* there is an article by Reed Andrae, former foods department manager, Student Union, Oklahoma A. & M. I should like to take issue with two statements Mr. Andrae makes in his article, "Why Have Competition Between Residence Hall and Union in Providing Income Producing Facilities?"

On page 39, column 2, Mr. Andrae says: "College unions have been built as gifts and endowments, by state appropriations or by funded indebtedness, *the repayment for which is generally to be derived out of their operation.*" [italics mine]

I think you will find the unions that must pay for their funded indebtedness do so generally by a student fee and certainly not from funds derived from the operation of the building. I am familiar with the Oklahoma A. & M. situation, and it is too bad the way they must amortize their bonds. I believe research would prove that Mr. Andrae's statement is not entirely accurate.

On page 40 of his article Mr. Andrae says: "I wish to digress for a moment and state that a categorical refusal of permission to participate actively in the competition for customers or clientele of the local community is frequently injurious to the operational solvency of a union."

I should like to state categorically that Mr. Andrae misses the big picture regarding a successful student union. Nothing could be more injurious to the successful operation of a union than for a union to solicit from the community business that rightfully belongs to the merchants who pay the taxes that help support the college.

In making those two statements, and particularly the latter one, I fear that Mr. Andrae is not familiar with the practices and fundamental policies of a student union, and I want to take this opportunity to put in writing that we, at Oregon, just don't believe in the theories he advances on page 40.—R. C. WILLIAMS, director, Erb Memorial Student Union, University of Oregon.

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MILTON FOX-MARTIN

Chairman, 25th Reunion Committee, Yale '35

ALUMNI GIVING WITH "EXTRA BARK" is in the making for Yale University. In less than a year, a unique arrangement inaugurated by the class of 1935 has caught the fancy of one-fourth of the class and shows signs of perpetual motion for the next eight years.

It is traditional for each Yale class to present a substantial cash gift to the university on the occasion of its 25th reunion.

Facing up to its responsibilities with respect to its 25th reunion gift program, the class of 1935 decided that it should undertake to give no less than \$100,000. It was obvious to the class committee that the class wouldn't have a prayer of raising \$100,000 if nothing was done about it before 1959-60. Only through the collection of gift pledges during the next eight years, and the sensible investment of the funds collected, could the class look forward to accumulating such a sizable 25th reunion gift. In the spring of last year, therefore, our committee set out to study ways and means of obtaining pledges and investing them.

The question of the suitable investment of pledges collected each year during the next eight years was soon seen to be of vital importance. Consequently, the class committee gave consideration to varying points of view as to financing and investment methods. It recognized that a large element of certainty could be achieved by investing the money in either U.S. government bonds or in a savings bank, but retaining the funds in such cash equivalents would expose them to the erosion of more inflation and limit interest to low levels. Furthermore, any opportunity for capital appreciation would be precluded.

To invest the 25th reunion gift collections in common stocks would run

the risk of market losses and would call for investment decisions on the part of the committee; decisions that the committee was neither qualified nor willing to make.

By a process of elimination, the committee decided that the most prudent use of annual collections would be to invest them in the shares of a well managed balanced mutual fund. Through this medium, the annual contributions could be invested in a broadly diversified list of bonds, preferred stocks, and common stocks selected and supervised by experienced investment professionals. Dividends would be reinvested each quarter and these, together with allocated net realized capital gains, would compound over the next eight years to augment yearly cash collections. Based on the past records of outstanding mutual funds, such an investment, furthermore, would appear to offer a reasonable hedge against inflation.

FUND FOR SMALL INVESTORS

Having made this decision, the committee approached the Fiduciary Trust Company of New York. For small accounts, wishing to avail themselves of its professional investment services, the company was interested in the establishment of a mutual fund—known as the Hudson Fund—in which these smaller investors might pool their investments collectively to obtain the benefits of Fiduciary Trust Company management.

The Fiduciary Trust Company agreed to receive all contributions; send out acknowledgements; invest the contributions quarterly in Hudson Fund shares and arrange for reinvestment of dividends; sell, or arrange for the sale of, any securities received in lieu of cash; provide the committee

and Yale University quarterly cash statements of the account, including a statement of the number of shares held in the account.

The committee was cognizant of the fact that certain members of the class might prefer to have their pledges deposited in a savings account (rather than invested under the "investment plan") because of the possible risks that always accompany any investment program. For these, arrangements were made with the university to deposit such pledges in a special account that would be credited with 2½ per cent interest, compounded annually.

In response to the original announcement of the plan in June of last year, and two follow-up letters, the class of 1935 had \$14,000 in its 25th reunion gift account at the end of 10 months. This total breaks down like this:

No. of annual pledges	162
Total of annual pledges	
Investment Account	\$4300
Savings Account	700
TOTAL	\$ 5,000
No. of one-time gifts	14
Total of one-time gifts	
Investment Account	\$2700
Savings Account	600
TOTAL	3,300
Gifts of securities to be held until 1960—present market value approximately	5,600
TOTAL	\$13,900

Gift of acre of land in California. When sold, proceeds will be put into the Investment Account.

Projecting the annual pledges of \$5000 per year over an eight year period, the class of 1935 has an indicated eight year total of about \$45,000 cash paid into the fund, or an average "campaign contribution" of approximately \$250 from each of the men that are participating.

Naturally, the class hopes that re-invested dividends and appreciation from that portion of pledges designated for the Hudson Fund will increase the original contributions. Likewise, it is hoped that dividends and appreciation on securities held in custody until 1960 will increase these gifts that have a current market value of about \$5600.

The class of 1935 has made a good start toward its goal of more than \$100,000 in 1960. Although one can never predict the performance of investments, it would appear that nearly \$50,000 has been pledged, and our drive has just begun.

One College's Program of **INSURANCE**

PART I

Introduction and Property Hazards

VIRGIL R. HOWELL

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Insurance Consultants
Los Angeles

This series of articles will be of value only if you substitute the name of your own institution for the "One College"

AS A MEMBER OF A FIRM THAT HAS been analyzing insurance programs on a completely independent and objective basis for more than 30 years, I have no hesitance in stating that schools and municipalities are the most difficult effectively to program. While every college may have some particular problems of coverage, cost or control, the general absence of freedom to purchase insurance on a basis of competitive merit is the greatest single handicap of the average college business office.

To an unbiased observer, entirely divorced from any sales consideration, it is an anomaly that the insurance buying of educational institutions rarely reflects either the precepts of their courses in business administration or the more effective individual buying practices of their trustees, alumni or other supporters.

The insurance trend is to purchase coverage on its competitive merits. It can be further stated that the final determination of premium rate and





It is impossible to foretell how often a given peril will become active, or how or what kind of damage will ensue. Fire recently destroyed this school building in North Carolina at an estimated loss of \$194,000.

cost is based upon the variables of loss experience, underwriting judgment, and the negotiating facilities of the competing interests.

A well balanced and economical insurance program cannot be attained unless the designated administrative officer of the college has (1) a comprehensive knowledge of the operations of the college and the problems that confront it, and (2) the time, patience and persistence necessary effectively to negotiate with brokers and underwriters for maximum available coverage at minimum cost.

An example of time and patience can be cited from the experience of one college administrative officer involving a highly technical and borderline "explosion" loss. Much time was spent in conferences to establish his minority opinion but his persistence was rewarded by the conversion of a "no claim" file to a \$75,000 payment.

JOINT RESPONSIBILITY

The selection of types and amounts of insurance involves judgment factors for which no reliable formula has yet been designed. It is impossible to foretell with complete accuracy how often a given peril will become active, or how or what kind of damage will ensue. Nor is it possible to determine in advance whether measures adopted to curb the activity of perils, or minimize the results thereof, will prove wholly effective or not. Divine guidance and psychic infallibility are required accurately to evaluate the pro-

priety of insurance against such forces of nature as earthquake, or to forecast the eventualities of legal liability for injury to persons or damage to property. One of our clients recently was adjudged liable for injury to one person in the amount of \$186,000.

The estimate of each peril with respect to its probable frequency of occurrence and size of possible loss is a matter of conjecture. There is no mechanical procedure or mathematical formula by which a positive conclusion may be reached. However, this objective is not entirely insurmountable because past experience is replete with examples of the behavior of risks*and by consulting this accumulated knowledge, and applying it with the proper measure of common sense to the problems of the institution, an evaluation or approximate measurement of exposures to loss within reasonable limits may be "estimated."

The significance of the foregoing comments is that one or two administrative officers should not be expected to bear the responsibility of determining the types and limits of insurance to be carried against losses of a catastrophic nature. Decisions involving losses of a magnitude that would impair the financial responsibility of the institution should be jointly shared by other administrative officers and, preferably, by the trustees. A good example is that of a mountain-top observatory with large loss possibilities confined to the extremely remote chance of aircraft impact and resulting fire

damage. It was deemed prudent by joint decision not to test the law of averages with such high values at risk.

ONE COLLEGE'S PROGRAM

In an effort to contribute something tangibly constructive and to submit some technics of administrative procedure and control that can be put into actual practice, *i.e.* broaden coverage, reduce cost and save time, we propose to be specific, get down to cases, and lay before you one college's program with which we have had intimate contact as its independent insurance analysts and consultants.

As a clinical study of "one college's program," the identity of the patient is not as important as the nature of its symptoms (exposure to loss), needs (insurance requirements) and treatment (coverage provided). The California Institute of Technology only assented to, but did not suggest, its clinical case history for this occasion. The review only includes those risks that are common to most educational institutions and does not treat such extensive and specialized off-campus activities as wind tunnel, Palomar observatories, and jet propulsion laboratory.

The following review will only be of value if the name of your own institution is substituted for "one college." We further suggest that you discuss any apparent advantages of "one college's program" with your own agent, broker or company to confirm

whether they have or have not been made available to you. If the answers are negative or conditional, your question should be "Why?" There is no more stimulating or result-getting question in the buying and administration of insurance. If the only answer to your question is "because it is the rule," then you should be resourceful in the recognition that many times special situations cannot be equitably governed by prevailing rules. Experienced insurance buyers know that what was obtained at first as an exception later becomes available to all as an accepted general rule.

PROPERTY HAZARDS

1. *Fire and allied perils of explosion, windstorm, aircraft, motor vehicle, lightning, smoke, riot, civil commotion, vandalism and malicious mischief.* All campus properties of insurable nature are covered under a *single blanket amount*, free of restrictive co-insurance or distribution clause conditions, including automatic coverage for subsequently acquired locations and on property temporarily away from the premises.

Blanket coverage permits the total amount of one over-all blanket cover automatically to follow fluctuations in value; it covers shifting of values from one building to another, eliminates the detail necessary properly to check individual policies against values at each specific location, prevents under-insurance on some items and over-insurance on others at the same time. It is generally found that lower rates result from the compilation of a blanket composite "average rate," in addition to broader policy form and more positive control with minimum administrative supervision.

As elementary as these basic virtues of blanket insurance may appear, we will venture the opinion that more than 50 per cent of the colleges and universities have substantial "specific" insurance in their programs. A brief and summary axiom to remember is that "specific insurance favors the insurance company; blanket insurance favors the insured."

The "all property" form includes registration and other valuable records for the *cost of reproduction* in event of loss. Unless so specifically included, the recovery for such records would be limited to the cost of blank paper and ink. Some policy forms provide coverage for the cost of *transcribing* such records, but we know of no standard



Another view of the wreckage left after the North Carolina school fire.

printed forms that cover the cost of *reproduction* in the event of total destruction to the record. (The inclusion of valuable records is not recommended when the fire insurance is subject to coinsurance because of the uncertainty of the amount to be included for the cost of reproduction.) Inasmuch as the coinsurance has been removed from the college's policies and the most important records and perils have been covered, the college has not elected to pay additional premium for "all risk" coverage available from many companies under a separate policy form.

Coverage is divided between the strongest stock and senior mutual insurance companies to maintain a healthy competitive position in addition to the loss prevention engineering facilities of both groups. With respect to fire prevention, consideration has been given to loss of life to the extent of also obtaining an independent survey from the municipal fire department to assure full compliance with its recommendations. In its broadest sense, a thoroughly planned insurance program becomes at least a partial safety program in its pursuit of lower costs through fire and accident prevention. Fundamentally, the primary goal of an insurance program should be *immunity from loss* and, secondarily, *indemnity against loss*.

The policy forms are concurrent for all practical purposes and embrace the principal advantages available from both the stock and mutual companies.

The fact that property values have soared in recent years points up the danger of coinsurance warranties unless appropriate increases have been made in amounts of insurance carried. For example, if a building cost \$250,000 in 1939, its present day values may be approximately:

\$600,000 Replacement value (new)
100,000 Depreciation

\$500,000 Insurable value (actual cash value)

If \$350,000 specific insurance is carried on this building, subject to a 90 per cent coinsurance clause, a \$100,000 loss would be adjusted as follows:

\$500,000 Insurable value
450,000 Insurance required by 90 per cent coinsurance clause
350,000 Insurance carried
100,000 Amount of loss
* 77,777 Recover from insurance company
22,223 Coinsured by college
* Amount of insurance (\$350,000)
or 0.777 x amt. of loss
Insurable value x 90% \$450,000

The college does not insure against the difference between insurable value (new replacement cost less deprecia-

tion) and replacement value, even though this coverage is available by attachment of a depreciation endorsement or by purchase of a separate replacement cost policy. Most of the college's buildings are of fire resistive construction and the distribution of values is sufficiently well spread to preclude the probability of serious damage.

If an institution has older buildings of combustible construction, involving substantial values, replacement value insurance could be highly desirable. This is particularly so if the predominate practice of private colleges is followed and no depreciation reserve account is maintained as an asset account.

The policies are written so that one-fifth of the total insurance expires each year, thus permitting the budgeting of this insurance cost.

A blanket policy (not limited by specified amounts on specific properties) covers on noncampus properties that the college is holding for sale, income or under direction of bequests. Coinsurance is applied to this policy, which imposes an obligation to maintain insurance for 90 per cent of the insurable value. A valuation report is obtained from the buildings and grounds department upon the acquisition of any new properties and also on all properties at appropriate intervals. Automatic coverage is provided for newly acquired locations.

Rental income insurance is arranged by endorsement to the fire policy covering off-campus property in those instances where the revenues warrant such protection and the properties are of combustible construction.

2. *Earthquake.* Earthquake insurance is carried in a blanket amount, subject to a 5 per cent deductible, on three campus buildings that are considered susceptible to structural damage in the event of an earthquake of major intensity.

The coverage is afforded by endorsement to the blanket fire policies; however, the underwriters have required coinsurance with respect to the peril of earthquake. The college previously insured against the first 5 per cent of loss on all campus buildings but recent sharp rate increases have forced the trustees to the conclusion that the substantial premium cost is incommensurate with the probabilities of loss.

Certain noncampus buildings also are insured against earthquake damage by endorsement to the blanket sched-

ule fire policy. Inspections and recommendations of the building and grounds department generally determine the properties to be covered and the amounts of insurance to be carried.

3. *"All risk" coverage.* An extensive schedule of scientific equipment, objects of art, special mineral collections, and the like is insured against practically all risks of loss or damage under a single policy. A periodic review is made of this schedule to re-evaluate the items covered and the advisability of maintaining such insurance on certain items in the light of past and reasonably probable future loss experience.

The principal advantage of "all risk" coverage is to insure against the perils of theft and breakage while on the campus, and fire, theft and breakage while in transit or otherwise at



risk away from the campus. The values insured are deducted from the values used in arriving at the amount to be insured under the blanket fire policy covering on-campus properties; however, the fire policy only excludes "such property as is otherwise covered by insurance."

The scheduled items are insured on a "valued basis" whereby any loss is paid in the amounts declared in the policy, thus avoiding the frequent difficulties that arise in determining the "actual cash value" of such property at time of loss.

4. *Crime hazards.* Money, securities and other personal property of the college are subject to loss, damage or destruction as the result of many occurrences that may be classified under the broad general title of "crimes." This title includes such losses as larceny, theft, safe burglary, holdup, robbery, forgery (of increased importance when facsimile signature used) and the dishonest acts of an officer or employee.

One policy covers all of the foregoing crime hazards and also includes "disappearance" of money and securities.

A good illustration of the trend from specific to blanket insurance is found in this classification of coverage. The college no longer specifies amounts of insurance for certain registration days, inside and outside robbery, safe burglary, or the amounts to be insured against dishonest acts of named employees or positions. Instead, the coverage is blanket for a specified sum applicable to losses (a) within the premises, (b) away from premises and (c) dishonesty of employees. It is the only sound basis upon which such insurance should be written. If one is smart enough to determine just where or in what amounts any particular loss would occur, the probabilities are that he would never have such a loss.

5. *Mechanical insurance.* Insurance is maintained on boilers and pressure vessels requiring periodic state or city inspections in addition to certain other equipment. The policy affords blanket protection on all subsequently acquired equipment of the type insured.

Which of the mechanical equipment in your own institution warrants insurance coverage can only be determined by a thorough analysis and review of your own particular operations. It should be borne in mind, however, that the scope of explosion coverage afforded under the extended coverage endorsement attached to your fire policies has an important bearing upon the extent of coverage required under separate mechanical insurance.

6. *Automobile material damage.* A blanket policy affords automatic coverage on all vehicles licensed for use on public highways (nonlicensed vehicles are covered under the fire insurance policies) against the perils of fire, theft and comprehensive damage, excluding collision. Collision damage was formerly carried with a \$50 deductible, then the deductible was increased to \$100, and for the last five years this risk has been fully self-insured at a consistent premium savings in excess of losses sustained.

Fire insurance is particularly warranted in the event several vehicles are stored at a single location with concentrated values subject to one fire.

(To Be Continued Next Month)

From a paper presented at the 1953 convention of the Western Association of College and University Business Officers.

To improve the Quality of Life—

**colleges must close the gap between cultural
courses and bread-and-butter courses**

ARTHUR S. ADAMS

President
American Council on Education

IT IS COMMONPLACE TO NOTE THAT a fundamental characteristic of human nature is that we all, though we move in remarkably diverse directions to accomplish it, always seek something better in life in the future than we have known in the past.

In the years since World War II, it has been notable that in our country this objective has been translated into a concern not only for a better life for ourselves but also for people of other parts of the world in recognition of the need that the quality of human life everywhere on the planet should be improved. It is strikingly impressive that this need is reflected in all parts of our society and is shared by businessmen and artisans as well as by those in the professions.

One especially significant piece of evidence of this is that in any meeting these days, whether of a labor organization, a Rotary Club or an educational association, we find that a part of the program is regularly given to international cultural affairs and there is always good attendance for that part of the program.

CONCENTRATE ON LIFE HERE

I do not intend to expand upon the theme of what we can or should do abroad to make life better for those in other countries, attractive and rewarding though such a theme might be. Rather, I wish to develop the thought that our potential contribution to such an objective can be greatly increased by giving attention to what we can do to improve the quality of life in the United States, especially the particular rôle of education in effecting such improvement.

At once, I am sure the reader wonders what meaning I assign to "quality" when I use the word in this connection. We already boast of our high standard of living and I am quick to say that I enjoy its comfortable features as well as the next person. But it is not that sort of quality I have in mind. Nor do I speak of that now

archaic notion of quality that related it to social status. I do not even have in mind the academic excellence of a student who makes a straight A record. Rather I am concerned with that distinctive trait and capacity by which one may come to a clearer perception and a deeper understanding of the unity between life and knowledge.

And when I speak of the flair for quality, I have in mind, in the strict literal sense, the power of discriminating and discerning the quality that I have just mentioned. This concept of flair is somewhat the same as that used by clothing specialists in home economics when they speak of one who, quite irrespective of cost or material, has the ability to judge just the color and design of costume that best suits her. While one may speak of flair in this sense as being virtually instinctive, I hold the view that in this, and in the broader sense in which I use the word, it is like all other human attributes in that it is capable of cultivation.

Another way of putting into words what I have in mind was well expressed by William James when he said, "What the colleges—teaching humanities by examples which may be special, but which must be typical and pregnant—should at least try to give us is a general sense of what, under various disguises, *superiority* has always signified and may still signify. The feeling for a good human job anywhere, the admiration of the really admirable, the disesteem of what is cheap and trashy and impermanent—this is what we call the critical sense, the sense for ideal values. It is the better part of wisdom."

What has all this to do with the land-grant colleges? My answer is that because the land-grant colleges

were established to meet the educational needs of the people and because they have been so successful in carrying on their mission of teaching, research and extension work in the practical and cultural arts and sciences, they should be especially sensitive and alert to the growing need of finding some effective means of developing a greater unity between life and knowledge.

EXPERIMENT WITH COURSES

Specifically, I have in mind the fact that we worry a good deal about the growing particularization of knowledge with its inevitable result of more and more narrowly based specialization. We tinker with curriculums with the idea that through this means we at least may expose the student to a broader comprehension of life than that given by his field of specialization. We may experiment with survey courses in the hope that the broad culture we sense is needed may be achieved by homeopathic dosage. Meanwhile, the professors in the specialties fume that such moves rob them of valuable time in which to develop a measure of genuine technical competence in their students, and those who are charged with instruction in the cultural fields are frustrated with the hop, skip and jump treatment they feel the circumstances of limited time require.

What about the students? From what I hear and see in campus newspapers they, too, have a sense of disquiet about what they consider conspicuous gaps between what they recognize as bread and butter courses, cultural courses, and the easily recognizable facts of day-by-day living. In discussing with students the recommendations of the American Council

From an address presented at the meeting of the Association of Land-Grant Colleges and Universities, Washington, D.C., 1952

on Education's special committee on athletic policy last year, it was more than a bit devastating to me to learn that some of them, at least, are surprised that college presidents were conscientiously trying to relate ethical principles to athletic policy. To a few of them at least, ethics was something you studied in the philosophy department and athletics was in an entirely different world.

A further point is that, with the enormous growth of knowledge in the last quarter of a century—more than fivefold in the field of physics—and its consequent subdivision and compartmentation, we give more and more emphasis to a sort of intellectual caste system. Those in the humanities worry about the increasing popular recognition given the natural sciences; those in the social sciences borrow the jargon of engineering; those in engineering and agriculture wonder about how much or how little time they should give to cultural studies.

CONFLICT IS NEEDLESS ONE

Fundamentally, the conflict seems to be between the cultural and vocational aims of life. It is a conflict that is centered in higher education with the bewildered public on the side lines but much concerned about the issue. This conflict is a needless one. It diverts attention from the cultivation of that sense to which James referred to as "the feeling for a good human job anywhere." It is especially confusing to those in other lands whom we seek to help to realize a better life. Most important of all, it strikes at the development in our own country of confidence in the conviction that we do hold the individual, not his specialty, to be important.

To my mind, there is no quick, easy, mechanistic way to solve the question. Genuine unity is not achieved by arbitrary action. It is achieved only by growth. In this case that growth requires that all those concerned with higher education make conscious determined effort to deal with their specialties not in such a way as to dull expertness, but so as to illuminate expertness with cultural perspective. To paraphrase Guy Hunter, the teaching of the oil technologist could include, along with the complicated technics of drilling and refining, the origin of the material, the background, beliefs and customs of the people in Iran or Venezuela, the future relationships between Western industry and the primary

products of those countries, population problems, and the exhaustion of minerals and its effect on the future.

To be truly successful in achieving the objective, this unifying treatment of the cultural and technical can be no superficial adaptation of the tricks by which the broadcaster twists his story to bring in the commercial. The student would see through that fast enough, we may be sure. No, it calls for rethinking of course objectives and reevaluation of all the material presented in them.

It also calls for appreciation of and awareness by those whose special interests are in the humanities and the social sciences that the accumulated wisdom of Western civilization which is their special province must be reinterpreted for our times so that all, including the working public as well as the students, may understand that culture is not a detached oligarchy ruled by specialized scholars, but a useful and rewarding part of daily life.

Mlle. Simone Weil in her book "The Need for Roots" deals eloquently with this point when, in speaking of the regeneration of industrial civilization, she says: "The cure consists in an effort of translation; not of popularization but of translation, which is a very different matter. It isn't a question of taking truths—of already far too poor a quality—contained in the culture of intellectuals, and then degrading them, mutilating them, and destroying all their flavor, but simply of expressing them in all their fullness in a language which, to use Pascal's expression, is perceptible to the heart for people whose feelings have been shaped by working class conditions."

In the same vein, A. N. Whitehead said in his essay on the aims of education: "The antithesis between a technical and a liberal education is fallacious. There can be no adequate technical education which is not liberal and no liberal education which is not technical."

NEW SITUATION

I suspect that one factor in our outlook on the matter is that we find our country, quite without having sought world responsibility, in a position of leadership which is based neither upon slavery nor colonialism. This is a brand new situation in the history of Western civilization. Up until now, we have been able to manage fairly comfortably without concerning our-

selves too much about the essential unity of the vocational and the cultural. We have been busy with our own affairs. But now we seem to be agreed that we have acquired a trusteeship for Western culture. There is insistence on every side that ethical and spiritual values must be recognized as the true basis for the effective working of democratic processes. These values are the essence of culture, of culture which is a vital part of the day-by-day experience of people of all walks of life and not the proprietary interest and concern of a small intellectual elite.

IMPORTANT FACTOR

Another powerful factor involved in this matter, which is presently potential rather than actual, is that colleges and universities in the next seven or eight years seem certain, by reason of population trends, to increase in enrollment by as much as 50 per cent. We all recall that in the enrollment bulge of 1946 and 1947 we were far too preoccupied with housing problems and the like to give the attention to the philosophical implications of our enormous increase in enrollment. Our concern was *how* to get the job done.

Today it is clear that we not only should take prompt action toward making educational opportunity available for the increasing numbers now in the elementary schools but also should provide an educational opportunity in which the unity of culture and vocation of life and knowledge is a reality to every individual in the greatly increased student bodies with which we shall then be dealing. There is an urgency about moving promptly toward this goal which makes me think of the quotation "It is later than you think."

It seems altogether clear that it is quite within the capacity of institutions that have made such dramatic contributions to the increasing of agricultural productivity, to the engineering science, and indeed to the cultivation of the liberal arts and sciences, to take a forward step toward developing a sense of unity between the vocational and cultural. With the development of such a sense in each student, we may look forward toward the realization of that power of discriminating and discerning with clearer perception that unity of life and knowledge which is the flair for quality.

DURING 11 YEARS OF PUBLIC ACCOUNTING and auditing experience I became acquainted with a goodly number of people, both men and women, who had succumbed to the temptation to appropriate for personal use funds of their employer.

In the large majority of these cases the job of getting the money and covering up was all too simple—the temptation was too great. In many cases it was only after repeated successes led the embezzler to try for larger amounts that discovery resulted. Out of these experiences came one conviction that remains to this day—that the employer has a major responsibility to surround the employee entrusted with the handling of money or other property with all possible safeguards against temptation. Otherwise, the employer is guilty of a major contribution to the crime.

It may be said that this point of view betrays an unnatural lack of confidence in the honesty of the average human being. On the contrary, I believe that it is a realistic recognition of the facts of life and, furthermore, that it will prevent that relatively small number of employees whose point of resistance to temptation is low under conditions of personal need from giving in to temptation and perhaps eventually being branded as criminals.

So much for the social or human aspects of our problem. Now for the responsibility which we as business officers have to protect our institutions from loss. Let us review briefly some general principles characteristic of good internal audit control.

First and foremost among these: In a given situation a routine must be provided that dishonesty will be possible only by collusion between two or more persons. Seldom have two employees agreed for long in systematic or other embezzlement. Soon distrust of each by the other results in discovery. This objective can be accomplished in some measure in the cashier's office, for instance, by having the cashier who receives and makes the initial recording of cash receipts segregated physically from the bookkeeper who maintains the records of charges for which the cashier is accountable. Sometimes, and this is especially true in the small college,

From a paper presented at the Eastern Association of College and University Business Officers, Atlantic City, N.J., December 1952.

Protect employees from temptation of

EMBEZZLEMENT

H. R. PATTON

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this bookkeeping function has to be replaced by a cash register method of automatic recording of accountability. However, one must not be blind to the weaknesses often inherent in the use of cash registers.

Enforced vacations should be the rule. Many shortages have been discovered only in the absence, perhaps because of sickness, of the defaulter. The records of many embezzlers show that they seldom took a vacation. In the absence of an employee who is responsible for the handling of money or materials, all of his work should be covered by another.

In the smaller college, where it may be difficult to provide a check on one employee by another, periodic but irregular audits should be made of the records by the chief business officer himself, and he himself should be fully aware of the methods that a dishonest employee might use. In this situation one may well ask who should check the business officer. I believe that he should insist on an outside audit firm without exception. Furthermore, he should have a frank and definite understanding with his president and the audit firm that he expects his own activities and records to be checked. During the course of such an audit he should provide that the audit firm representative confer with the president in his absence. In addition, the audit firm should be free to appear in his office for a checkup at any time and unannounced. The president should be informed of this procedure.

A fourth principle of good internal control: The chief business officer

should maintain a close personal contact with employees in positions of special trust and show a genuine interest in their personal welfare, remembering again that it is temptation rather than inherent dishonesty that is at the bottom of most defalcations. I am convinced that a strong deterrent to dishonesty in an employee can be his realization that those for whom he works have a sincere interest in his personal welfare.

I wonder how many business officers have a controlled stores system with adequate lock and record. Until recently on my own campus we seemed never to have enough money to provide the space necessary for stores control. In my opinion we were trying to save dollars and losing probably hundreds of dollars. Many employees will carry off a few feet of cable or pipe for use in their own homes who would never think of stealing cash. I have the feeling that no matter how small the college is in size, it is false economy to be without a controlled stores system. It is a strange although not unusual attitude of mind which overlooks carrying away from the campus pipe fittings worth \$25 but insists that taking \$10 from a cash drawer is a crime.

The business officer who has had some public auditing experience is fortunate. No business officer's conscience can by any stretch of the imagination be clear if any employee on the campus, who is entrusted with money or materials, is not adequately protected against temptation if it is within the business officer's authority to provide it.



DISASTER CONTROL PLAN *provides for handicapped*

CHARLES A. LEWIS

Administrative Assistant, Division of Community Relations, Wayne University, Detroit

ALTHOUGH NEARLY EVERY CAMPUS has its share of physically handicapped students, colleges located in large urban centers are especially aware of the problems of caring for these students in the event of disaster.

The number of such students is considerable because war injured Korean veterans are now replacing handicapped veterans of World War II. Polio and accident victims steadily continue to enroll. The welfare of these handicapped young men and women is important, and in case of disaster their protection is often a difficult problem.

Urban universities are necessarily concerned with the danger of disaster from enemy air raids because of their proximity to industrial plants. Further, all colleges that have war-related research in progress in their laboratories must recognize that the college campus, itself, could be a specific target for attack.

In Detroit, a major center of defense production, Wayne University has evolved a detailed plan to provide for the care of its handicapped students in the event of an emergency. This plan supplements a general disaster plan developed earlier.* While gen-

Crutch cases, as well as wheel chair cases, are included in the elevator evacuation plan. These students have their crutches beside them and will move immediately to the elevator if the alarm should sound.

erally designed to be used in the case of air attack, the plan would also go into operation in the event of fires or other disasters.

Wayne's main campus covers five city blocks. It includes a half dozen major buildings and nearly 90 minor ones, such as "temporaries" and converted residences. Wherever possible, air raid shelters are located in deep basements. When basements are not available, first floor areas are generally used. Thus, all students, including the handicapped, are expected to come down from the upper floors of buildings when the alarm sounds.

To facilitate this movement on the part of wheel chair and crutch cases, an effort has been made (1) to assign them only to buildings where they can be properly safeguarded in case of attack; (2) to give these students careful instructions as to their special type of action in case of air raid or fire drill; (3) to provide them, in some cases, with elevator keys, and (4) to instruct staff members, such as elevator operators, whose cooperation is needed.

Every student on the university's main campus who is either a wheel chair or crutch case receives special attention when he enrolls. The assistant dean of the college of liberal arts studies the student's proposed program in an effort to schedule his classes in one of the three major buildings in which proper procedures for his safety are possible. These are (1) State Hall, where there are no elevators, but where three air raid shelters are located on the first floor; (2) Science Hall, where adequate automatic elevator facilities exist, and (3) Old Main, where elevator service is maintained by operators.

In case a handicapped student has classes tentatively scheduled in other buildings, an effort is made to shift him to similar classes on the first floor of State Hall or in the two elevator-equipped buildings. If this is impossible, the director of admissions,

*This plan was described by Alfred C. Lamb, director of buildings and grounds at Wayne and chairman of the university's committee on civil defense, in the March 1951 issue of College and University Business.

records and registration arranges for an actual shift of the disabled student's entire class into the desired building.

The procedure in disaster drills is as follows: (1) In State Hall, the disabled students, already in first-floor classrooms, simply move to the shelters; (2) in Science Hall, they go to the elevators and, using a key which has been assigned to them, go down to the basement shelters, and (3) in Old Main, they go to elevator entrances and await transportation to the basement. Every elevator operator in this building has been instructed, at the sound of the alert, to go to the top floor and to come down floor by floor, picking up only disabled persons; the operator then repeats this process until all have been brought to the basement.

The plan has now been in operation long enough so that its success has been thoroughly demonstrated. By allocating the disabled students to only three classroom buildings, the university has also been able to simplify its outdoor ramp provisions for the same students. Actually, it has been found necessary to install the inclined entrances into only the three classroom buildings and into three others frequently used by handicapped students—the Student Center and the two library buildings.

The Student Center houses a large share of the extracurricular activities and provides a dormitory in which several of the handicapped students live. The General Library and the Science Library are conveniently located with reference to the other buildings. All three of these nonclassroom buildings, like Old Main, have elevator service maintained by operators, and the plan for reaching refuge areas is identical to that used in Old Main.

So far, no handicapped students have elected courses necessitating their entering buildings assigned to the professional schools of law or engineering on the main campus or the college of medicine buildings located downtown. Should they do so, similar arrangements would be set up to care for their needs in these buildings.

No special provisions are made for blind students or those suffering from abnormal heart conditions. They are instructed to follow the routine movement to the shelters. This plan is practicable for two reasons: Classmates are accustomed to helping blind students in any situation where such help seems appropriate, and heart cases can move to the shelters with little more effort

than they normally expend in leaving the buildings.

Responsibility for the movement of handicapped students in classes and of all other classroom students lies with the faculty member in charge. Early in the semester the faculty member appoints two monitors and four alternate monitors for each class in which he instructs. In the event of an alert he, himself, leads the class to the shelter, the monitors bringing up the rear. Class attendance at the shelter is then recorded.

In addition, each building has a civil defense director who has over-all responsibility for the movement of the students to the shelters, and the director has an alternate who acts in his absence. The placing of localized responsibility on faculty members, however, permits evacuation to proceed smoothly without specific directions from the director or his alternate.

One air raid drill is conducted each semester, at a time when the buildings are fully occupied—usually between 10 a.m. and 2 p.m. Faculty support is

firmly behind the one-drill-per-semester plan, staff members preferring it to the more frequent drills formerly used. Thus, faculty cooperation is excellent.

In the drill run off in March, the occupants of every building were in their refuges within five minutes and, in most cases, in a much shorter time. The handicapped experienced no delays or difficulties in their movement to the shelters.

The student health service plays a key rôle in the first-aid phase of the disaster plans, a first-aid committee being headed by the director of the service. When the alarm sounds, the health service personnel proceeds to a shelter in the basement of the Student Center, in which they are located. Here, there are telephone facilities so that the health service staff may be reached from any building and can go on call where needed.

Wayne, faced with a major civil defense problem, has sought to meet the challenge realistically. Provisions set up for the handicapped students are evidence of this aim.

When the alarm sounds, handicapped students have exclusive use of the elevators until their needs are taken care of. Shown here are students about to go down to the air raid shelter in the basement.





This medium sized institution has its own new

MEDICAL BUILDING

MOST UNIVERSITIES AND COLLEGES now acknowledge their responsibility for student health; their methods and programs, however, differ widely. Where there is a medical center on the campus the student health service often is linked with and overshadowed by the medical school and the university hospital. On other campuses the health service is sometimes squeezed into a basement or a dormitory wing, or assigned to a converted residence. It is a fortunate institution that is given the opportunity to erect a special building for the health of its students.

Yet architecturally there are few precedents to follow in the planning of such a building. Most architects will be influenced by the principles of hospital construction in general, perhaps not realizing that a medical building erected specifically for university students has its own peculiar needs and specifications.

For example, though one of its functions is the care of bed patients, it is not a hospital. Large segments of the usual hospital, such as pediatrics, obstetrics and major surgery, can be omit-

ted from the requirements, as well as special provision for chronic illnesses, organic and infectious. Since the economic status of the individual student is immaterial, it is unnecessary to provide more than one type of accommodation in the infirmary. Furthermore, the university power plant usually can be depended upon to furnish heat, light and hot water, and often laundry service.

On the other hand, there must be an isolation ward or wing to accommodate the cases of childhood diseases that arise among college students, and enough bed space to cope with sudden campus epidemics such as influenza. In the student health center the brisk outpatient service overbalances everything else, and is itself a fusion of three functions: therapeutic, preventive and educational. The x-ray and physiotherapy departments come in for

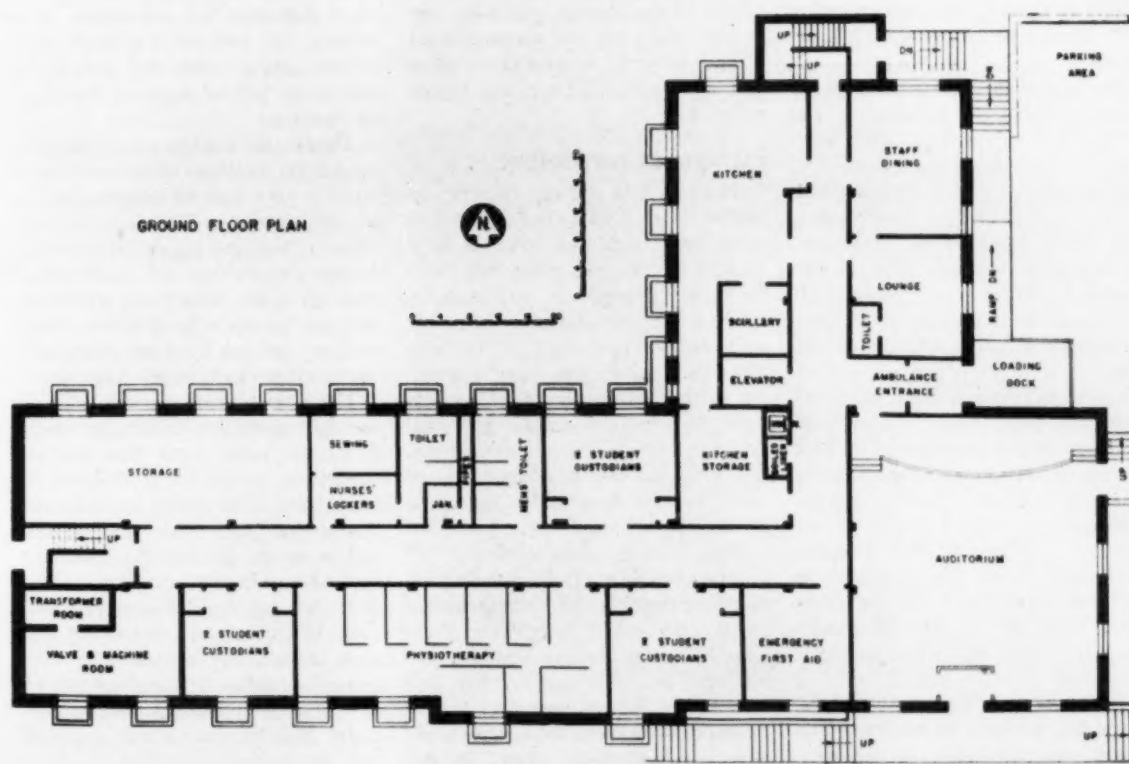
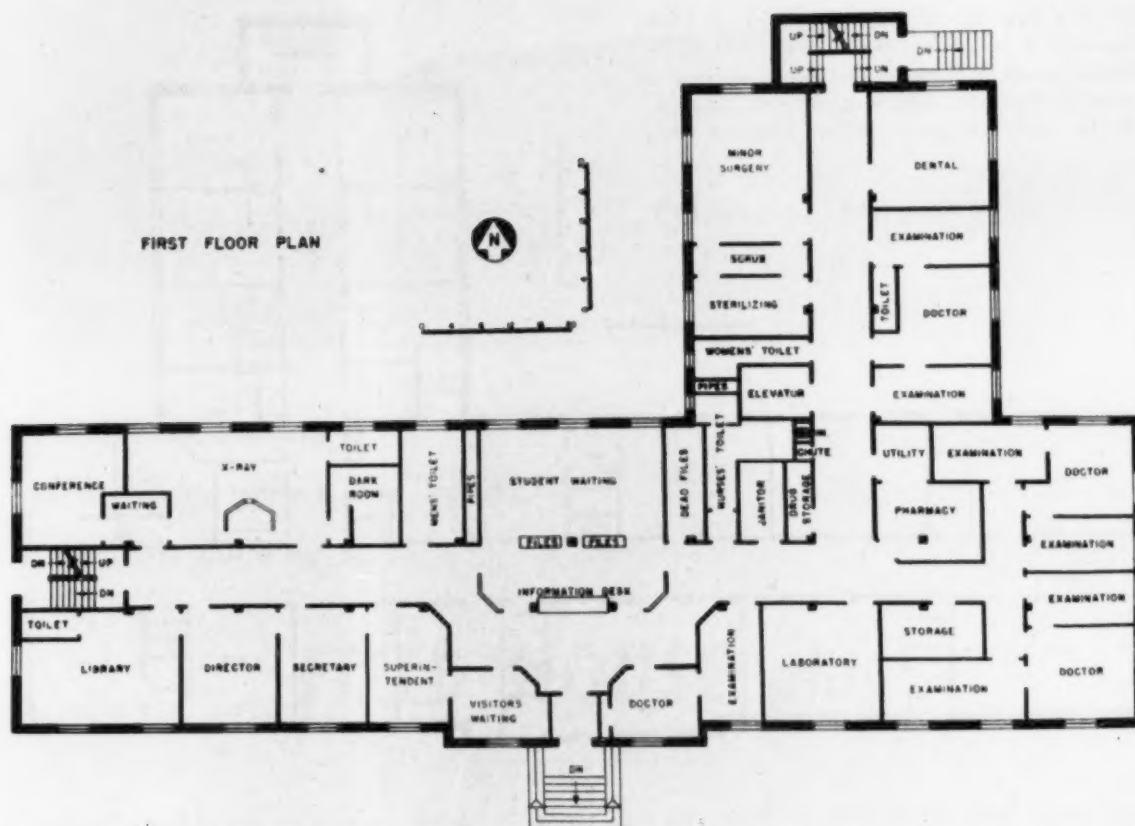
especially heavy use. Obviously, the usual architectural criteria for distribution of hospital space cannot be applied to the health center.

Ohio University has recently erected a building that expresses the health service function in physical form. A state institution enrolling 4000 students, Ohio University was founded in 1804, but it was not until 1937 that a full-time physician was appointed to develop the health service. The new health center was completed and occupied in 1950.

Two features of the Athens situation have particularly determined the character and scope of the services offered in the health center. First, it is not a commuters' college. Most students remain in the campus environment continuously throughout the academic year; the campus census does not drop unduly at night, nor at week

E. HERNDON HUDSON, M.D.

Director, Health Service
Ohio University, Athens



The third floor plan of the health center at Ohio University is not shown, but it is devoted to individual rooms for nurses, with a lounge and games room for their use. The wing corridor has quarters for cooks and maids and an open sun deck.



ends. Second, alternative hospital accommodation is meager or distant. The local hospital is a small one serving the community of Athens (population 8000), and the nearest medical center is at Ohio State University, 75 miles distant.

The health center is an L-shaped building of Georgian architecture. The construction is fireproof, with reinforced concrete floors and columns and curtain walls of brick. The length is 148 feet and the width 41 feet; dimensions of the wing are 45 by 41 feet. An automatic hydraulic type of elevator is centrally located, connects all floors, and opens directly in front of the ambulance entrance on the ground floor.

Asphalt and ceramic tiles and terrazzo floors are used; most wall surfaces are plastered and painted, and corridor ceilings are sound absorbing. There is a central vacuum cleaning system. Electricity and steam for heat and hot water are supplied by the university. Fluorescent fixtures are used on the first floor, incandescent on the other three. There is a nurses' call system, a paging system, and telephone communication.

Outpatient visits average six or seven per student per year, but only one student in five is admitted to the infirmary

during the same period. In recognition of these facts the first floor is devoted almost entirely to the activities of the clinic, comprising the doctors' offices, minor surgery, pharmacy, laboratory, and x-ray and waiting rooms. Here also are the administrative offices and the medical library and conference room.

PREPARE FOR EMERGENCIES

The rooms in the infirmary or, the second floor accommodate one, two or three beds, and each room is large enough to take one more bed. This "accordion" feature is important in view of the overwhelming nature of some campus epidemics. At ordinary times there are 40 beds, eight of which are in the isolation wing. All rooms have either individual toilets and wash basins or share bathrooms with adjoining rooms, so that no room occupant needs to enter the corridor and traffic is thereby reduced. Solariums are superfluous in a college infirmary.

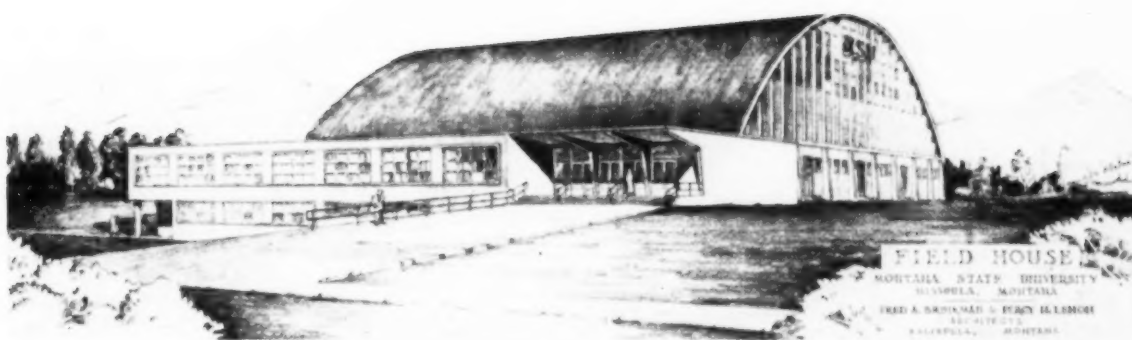
Individual rooms for nurses are provided on the third floor, along with a parlor and games rooms for their use. The wing corridor has quarters for cooks and maids on one side and an open sun deck on the other.

The stainless metal kitchen, with adjoining storeroom, is located in the

wing of the ground floor or basement, along with the staff dining room and small lounge. On this level is the large physiotherapy department and three bedrooms for the student custodians, five premedical students who do the janitor work and attend the emergency bell in exchange for their maintenance.

The sloping site of the building permitted the inclusion of an auditorium with its own outside entrance and a seating capacity of 120. This hall, an unusual but thoroughly appropriate feature, symbolizes the educational function of the center, and serves not only for the teaching activities of the medical staff but for many other university classes and campus meetings.

The appropriation for the building was half a million dollars, or about \$1.50 per cubic foot. The cost of equipment, estimated at \$50,000, is being paid from health fee balances. The student pays \$7.50 each semester and in return receives the following without further cost: complete medical care (but not major surgery); medicines and treatments; laboratory and x-ray service, and consultations with outside specialists at the discretion of the university physicians. All salaries except that of the director are paid from the student health fees.



**Changeable seating,
demountable stages and floors
make this building a**

FIELD HOUSE plus

FRED A. BRINKMAN

Architect
Kalispell, Mont.

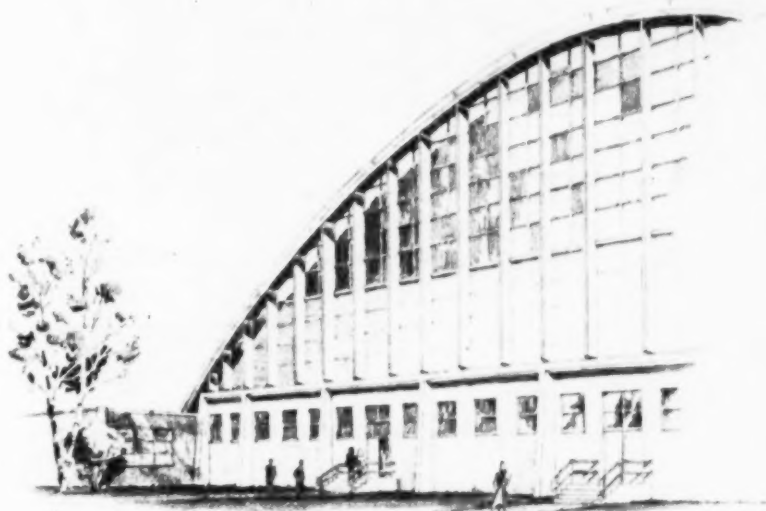
THE NEW FIELD HOUSE, WHICH IS AT present under construction on the campus of Montana State University at Missoula, is unique in many respects. The structure is not only designed to accommodate different kinds of athletic events but also such activities as concerts, shows and dances.

Provision will be made for the installation of theater seats and equipment. Changeable seating and demountable stages and floors will be used, and the arena floor may be cleared for athletic practice, military drill, farm and livestock exhibits, circuses, rodeos, water and ice shows, and similar spectacles. The plan is flexible and will allow extension to the north, south and east as future needs may require. At present, the building has a total of 7200 seats for basketball games; there are 1600 fixed theater seats in the balcony and 5600 in portable bleachers along the sides and ends of the arena.

In the field of engineering, this building has attracted considerable attention throughout the Pacific Northwest. It has the longest wood arch

span in the world. From center to center of pins, the clear span is 201 feet 6 inches. From the arena floor to the soffit of the arch at the center, the clear ceiling height is 71 feet, equal to the height of a seven-story building.

The arches are supported on reinforced concrete "A" frames 26 feet in height, and carry a combined live and dead load of 6000 lbs. per square foot. The structure has been designed for a maximum wind load of 60 miles per hour.



One end of the field house now under construction showing the center of the arch, which is equal to the height of a seven-story building.



SECTION - STRUCTURE

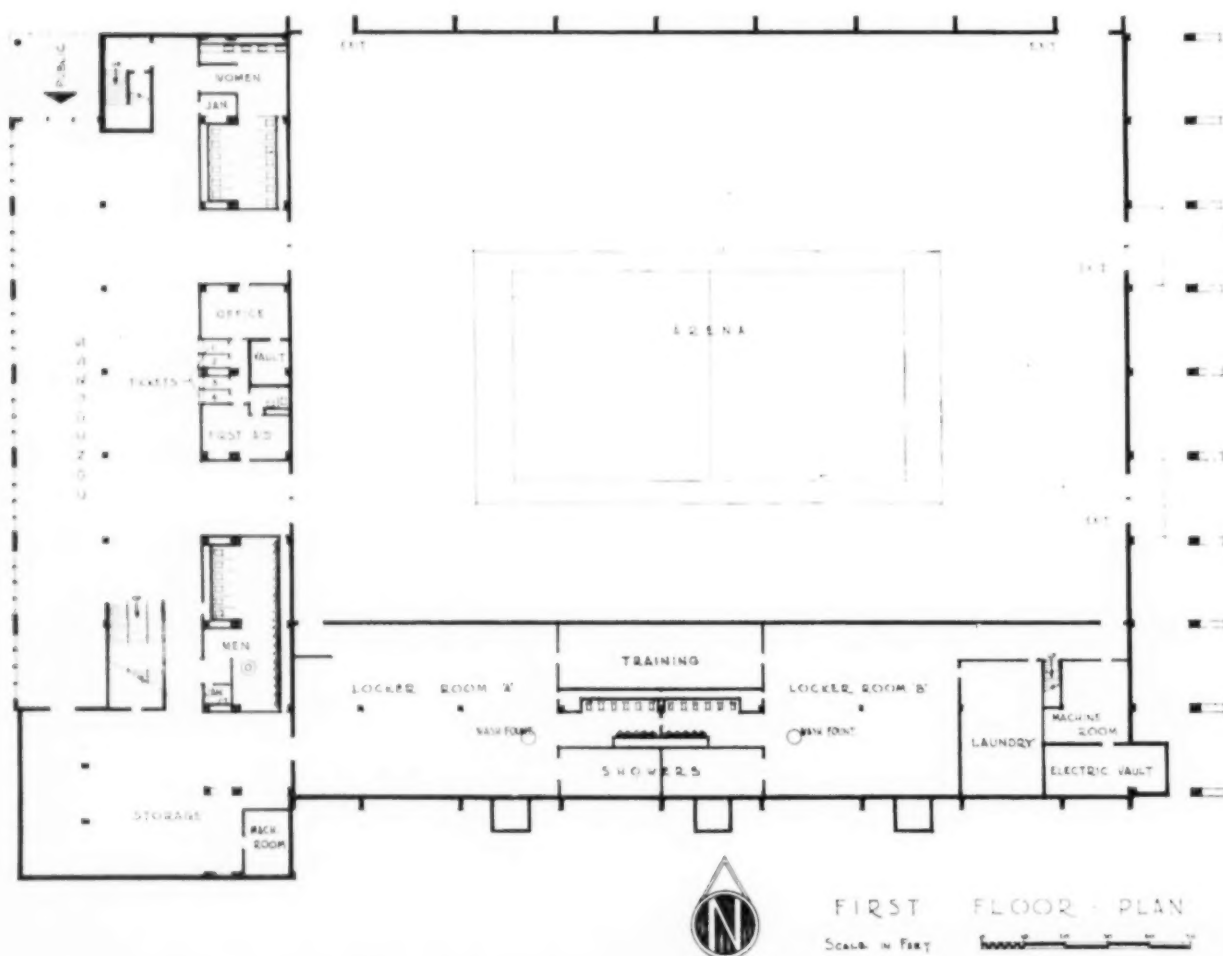
Sectional view of Montana States' field house, which boasts the longest wood arch span in the world.

The wood arches are built up of glued-laminated members and are of the three-hinged type. The cross section of the arch is 11 inches wide by 45½ inches deep. Wood purlins are solid beams 4 inches by 12 inches and are spaced 6 feet 7 inches o.c. Two-inch T&G decking is placed diagonally over these purlins and therefore

also acts as lateral bracing. The structural framing for the remainder of the building is entirely reinforced concrete except for the balcony, which is structural steel.

In the mechanical and electrical branches of the work, flexibility also keynotes the design. For example, a 1000 amp. bus duct has been carried

completely around the perimeter of the building, which will permit plugging in for any sort of lighting effects or appliances desired. The installed lighting capacity is ample and will deliver 100 foot-candles on the arena floor. The mechanical system is designed to provide 3.9 air changes per hour and will, therefore, handle a total

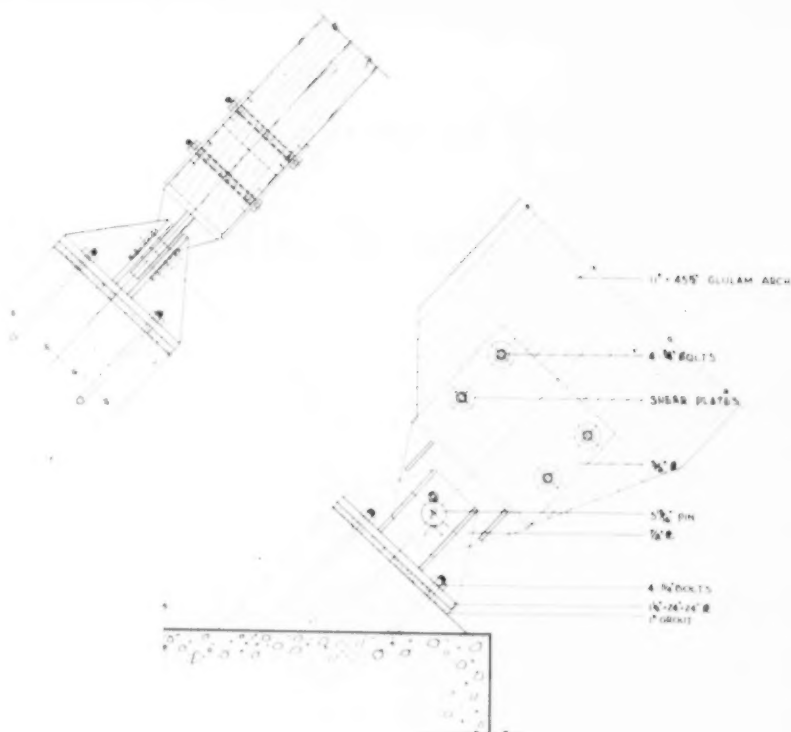


volume of 7,800,000 cubic feet of air from the arena in that period of time.

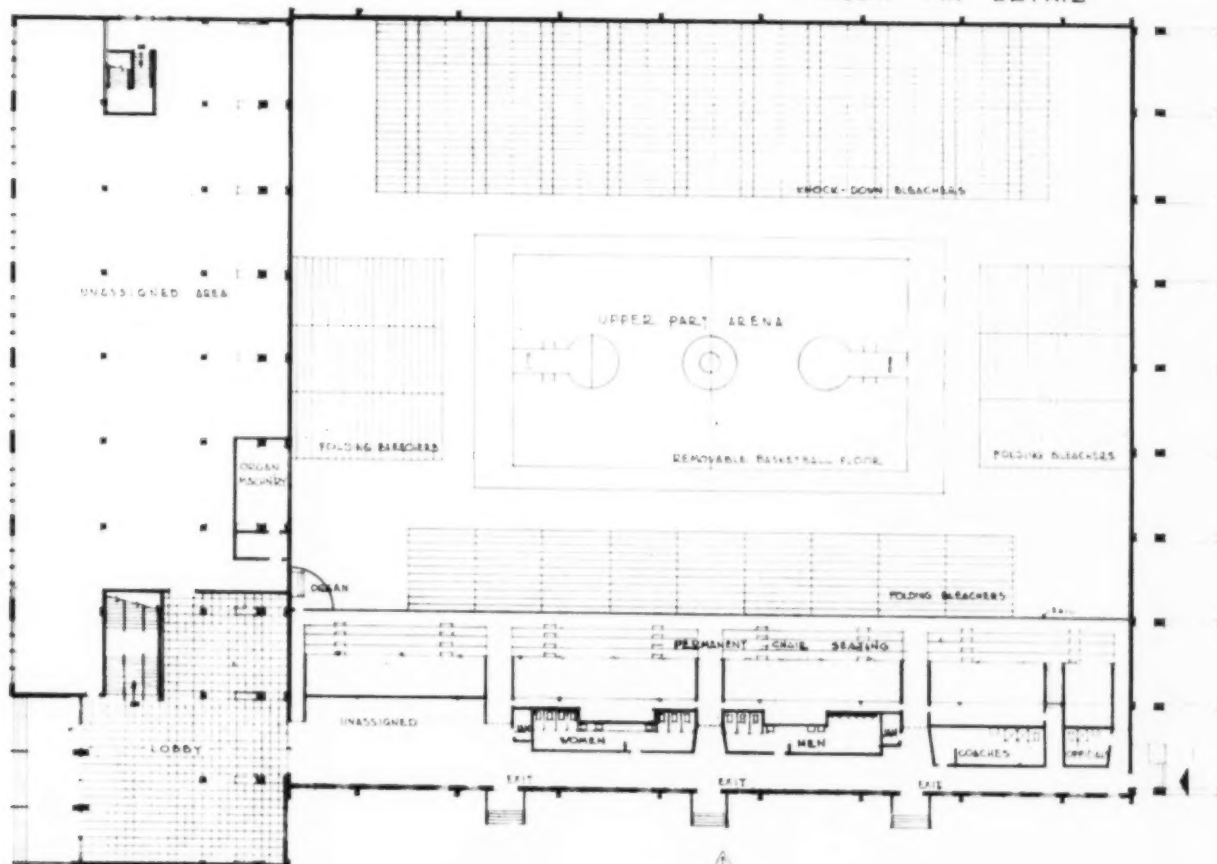
Contracts for the construction of this building were executed by the state board of education on March 3, 1953. The total cost of construction is \$697,258.40. The project is being financed without incurring a statewide bonded indebtedness and will, in fact, be self-liquidating, with repayment over a period of 30 years out of revenue derived from operations of the field house.

The building covers a ground floor area of 49,480 square feet and has a total volume of 2,895,500 cubic feet. The cost per cubic foot is therefore 25.1 cents. This is considered to be substantially below the current costs of such construction in the Pacific Northwest.

Architects for the building are Brinkman & Lenon of Kalispell, Mont.; Charles E. Kitchin of Seattle was the structural engineer. Completion of the project is scheduled for December 15.



ARCH PIN DETAIL



SECOND FLOOR PLAN

SCALE IN FEET

There is reason for optimism in

The scope of college HEALTH FACILITIES

"WHAT ARE OTHER COLLEGES DOING?" is a question frequently posed by educators keenly aware of their moral obligation to provide adequate medical facilities for students entrusted to their care.

For many years, the answer to this question could be based only upon fragmentary information, gleaned from various studies of individual phases of the problem, or obtained by firsthand observation. With the growing interest in insurance programs for colleges, however, a new source of authentic data came into existence. The insurance companies, needing certain information on which to establish rates and benefits, of necessity compiled detailed information about the health programs of many U.S. colleges.

SATISFACTORY SAMPLE

The file of "survey reports" which we have been accumulating since 1944, and bringing up to date each year, gradually has become large enough to provide our research people with a satisfactory sample on which to base conclusions about the health programs of American colleges.

This report is based on 239 survey

G. KINGMAN REID

President
Higham, Neilson, Whitridge & Reid, Inc.
Philadelphia

reports, selected from the many hundreds available. All are from institutions of higher learning, referred to as "colleges" throughout the report for purposes of simplicity. This sample comprises about 13 per cent of all U.S. colleges and is fairly representative of the total.

What happens when the college student awakens with some ailment other than the usual preexamination headache, or if he stubs his toe on the way to football practice?

In some 82 per cent of U.S. colleges, fortunately, he can obtain medical care free of charges other than those included in his tuition and fees. Granted that in 4 per cent of the schools this care is limited to what usually is described as "first aid," it is nevertheless encouraging to note that a much larger percentage (24 per cent) has "sick call," which provides for slightly more comprehensive treatment.

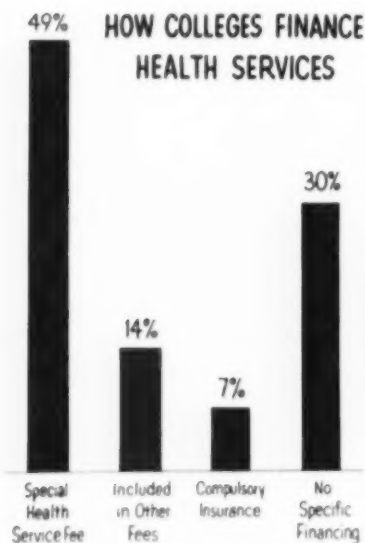
Should his ailment be of a nature calling for dispensary equipment and

services, he'll find it available to him, without cost, in 58 per cent of all colleges, and if he must become a bed patient, infirmary care, at least for a limited number of days, is provided free of charge by 57 per cent of the colleges surveyed. The availability of free medical services is graphically shown in the chart on page 41.

MAJORITY HAVE INFIRMARIES

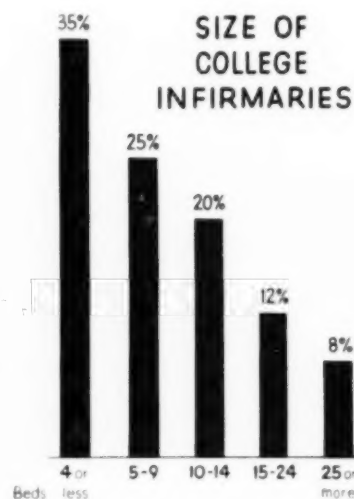
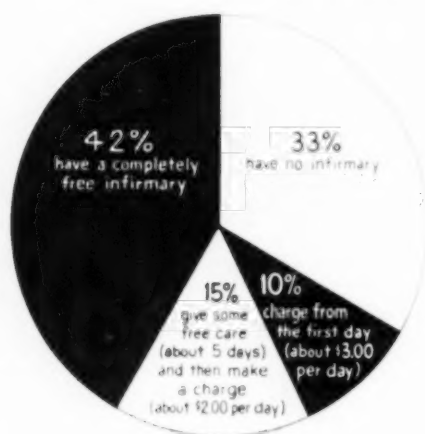
Actually, 67 per cent of all colleges have infirmaries, and 42 per cent make no charge whatsoever for use of infirmary facilities by the student. About 15 per cent give students some free days, ranging from one to 25 (the median is five), and then make a daily charge ranging from \$1 to \$11.50 (the median is \$2). Some 10 per cent of colleges charge for infirmary care from the first day, the cost varying from less than \$1 to \$8 per day (the median is \$3).

Of course, there are various miscellaneous medical services that some colleges provide without charge. Surprisingly, however, only 7 per cent say they offer free physical examinations, but 8 per cent make chest x-rays without assessing the student, and nursing



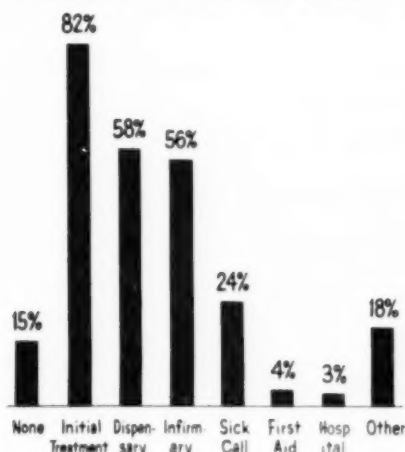
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STATUS OF COLLEGE INFIRMARIES



COLLEGE and UNIVERSITY BUSINESS

MEDICAL SERVICES PROVIDED by COLLEGES FREE OF CHARGES OTHER THAN THOSE INCLUDED IN TUITION AND FEES



care is actually provided, at no cost, by 2 per cent of the schools.

Summarizing the figures outlined, we find that four out of five colleges offer free initial treatment of illness or injury through a sick call, dispensary, infirmary care, or the equivalent. The size of college infirmaries, as might be expected, varies greatly, from one to 42 beds, but the average is eight beds.

HOW SERVICES ARE FINANCED

How do colleges finance these health services? Almost half (49 per cent) of all colleges charge a specific fee to students for their health service. Some 14 per cent include health service charges as a part of a fee that includes other items. Another 7 per cent require students to take out some form of health insurance, although this group is not to be confused with the large group of schools in which voluntary insurance is available to students. The remainder (30 per cent) of schools make no charge of any kind for medical service, but it is considered by many that the costs of maintaining health services are reflected in tuition charges.

What happens when the college student needs medical attention which necessitates calling in a doctor, or which requires the services of an outside nurse? One college in four (26 per cent) has a doctor in residence. Outside doctors' fees for office visits run from a low of \$1 in West Virginia to \$10 in Washington, D.C., while home or dormitory calls range from \$2 to \$10, depending on many factors. The median for an office call is \$4; for a home call, it is \$5.

Nursing rates seem subject to greater variations than are doctors' fees. The colleges reporting found rates ranging from \$3 in Worcester, Mass., to \$12 in many cities. The median is \$9, but the most prevalent rate was \$8 per day. Hospital rates also varied greatly from section to section (from \$3 per day in Chicago to \$21 per day in Cambridge, Mass.) but the median hospital rate seems to be \$10 per day for minimum accommodations.

It may perhaps be assumed that some of the variations in doctor, nurse and hospital rates are due to special arrangements made by individual schools, particularly the larger colleges, but the median figures seem to provide an accurate basis for comparison.

Data from the Bureau of Labor Statistics, incidentally, show that the cost of medical care in all of its forms has risen sharply since the beginning of World War II. The one most conspicuous increase has occurred in the cost of hospital care, which has nearly tripled. Inasmuch as college infirmaries, in many instances, are subject to the same type of operating expenses as are hospitals, the great majority of colleges have unquestionably felt the effects of increasing costs.

At the same time, other charges inherent in medical treatment also have been on the rise, to a lesser but nevertheless important degree. The introduction of miracle drugs, for example, while welcomed because of increased efficiency in overcoming infection, has made the *initial* cost of treating individual illnesses much higher than in the past. On the other hand, such drugs, by reducing the serious effects of illness and accident, at the same time may have actually helped to lower the *overall* cost of treatment.

It may be assumed, however, that colleges are finding it increasingly difficult to finance the health facilities offered their students.

Inasmuch as athletic activities have a direct bearing on the need for, and use of, college health facilities, data on sports also have been compiled on the survey reports utilized by insurance underwriters. Some 90 per cent of all colleges have intramural athletic programs, and the average school reports intramural activity in five sports. Basketball, baseball, tennis and swimming dominate the intramural sports picture, in that order.

Most schools (78 per cent) have intercollegiate sports programs; again, five sports are the average number

maintained. In order, the most important intercollegiate sports, so far as the number of schools having teams is concerned, are basketball, baseball, football, track and field, and tennis.

The foregoing represents those facts that can be obtained, with reasonable assurance of accuracy, from the material now available. Other facets of college health programs, while covered in the insurance survey reports, have not been reported on since the "sample" (number of schools supplying information) is not large enough to provide a reliable statistical index. The survey is a continuing one, however, and is constantly being expanded to provide additional information, both for insurance purposes and for study by America's educators.

As a matter of interest, the median enrollment of colleges in the sample group of 239 institutions is 530 students. This is somewhat higher than the 409 student median reported in the 1951 edition of "Student Body Size—Institutions of Higher Learning," published by the Office of Education, Federal Security Agency. The mean enrollment of schools in the sample, however, is 1112, which is about 300 fewer than the mean enrollment as computed from published sources. In both instances, these variations fall within the limits of standard sampling error.

70 PER CENT COEDUCATIONAL

Of the 239 schools in the sample, 70 per cent are coeducational, 18 per cent are exclusively girls' schools, and 12 per cent are for male students only. Colleges with both boarding and day students account for 73 per cent of the sample, 17 per cent have no day students, while 10 per cent are exclusively day schools.

Median annual tuition, including free tuition schools, is \$287 for day students and \$476 for boarding students.

In concluding this interim report on the status of college health programs, I find reason for optimism in the scope of facilities offered, but particularly in the growing interest in the subject evidenced by educators. In addition, there is the increasing number of schools that are making medical and accident reimbursement plans available to the student body. All in all, the next report on our continuing study should reflect an even healthier picture of medical facilities at the college and university level.

IT IS NOW RATHER GENERALLY ACCEPTED by deans as well as treasurers that residence hall life, together with dining service, are more than the mere provision for basic physical needs, but that they are an essential part of the social and educational pattern of the college community. Since students spend more than half of each day in the residence halls and the dining halls, there is an unusual opportunity, perhaps even obligation, to expose them to educational and social experiences that will become a part of their college life.

It is interesting to note that former students returning to their alma mater for a visit almost invariably identify themselves with the places where they lived or ate during their college days. We frequently hear stories of alumni being shown new buildings and achievements who, after a period of sincere or at least polite interest, wander off to the grand old places where they lived, even though these places might really be not quite so grand.

It is, however, not sufficient merely to recognize the educational and social opportunities in residence halls. A program has to be developed within each residence hall, between residence halls, and within the entire college that will assure that these opportunities are explored exhaustively. This is particularly true where there is a tendency toward segregation in the student body because of nonresident students or perhaps fraternities or sororities. Only if such a program is established will it be possible for the residence halls to reach the most desirable pattern of operation and achievement.

DON'T EXPECT IMPOSSIBLE

While it is the responsibility of the director of residence halls to accept eagerly and most willingly his responsibilities for his part in the over-all social and educational program, he cannot be expected to do so in a vacuum or if left out in left field.

This line of thought leads directly into a discussion of organizational patterns of residence hall administration. Much has been said and written on this matter, and no ready solution has been found. The persons responsible for the financial success of the operations feel strongly that in order to have effective financial control they should have the final decisions in all aspects of residence hall life, as all

aspects are ultimately reflected in the profit-and-loss statement.

On the other hand, it would be difficult to deny a dean's very deep-rooted interest in residence hall life. *There* is the basic conflict. Some colleges try to resolve it by making a financial officer responsible for residence halls; others put them under the control of a dean. Local conditions, personalities and tradition often will decide the organizational pattern.

SYSTEM HAS DRAWBACKS

There is one solution, often used, which, in my opinion, has great inherent dangers. This is the system whereby the personnel within each residence hall is divided into a group reporting to the dean, while another group reports to the treasurer or financial officer. This type of organization splits the residence hall staff right down the middle, and disagreements or problems somewhere down the line frequently have to be brought right up to the top level of administration, while they should have been settled right within the individual residence hall.

It seems only sensible to have all personnel within the residence hall system report to one person who, in turn, if necessary, could be responsible to the dean for the social and educational aspects of his operation, and to a financial officer for the housekeeping and financial affairs. Personally, I would not want to be that person, and he would have to count patience, diplomacy and perseverance as his greatest attributes. However, if a split in responsibility is necessary, I would prefer to keep it out of the residence hall level.

The social and educational administration of residence halls usually is accomplished through househeads and assistant househeads. There seems to be a definite tendency away from the

motherly type of woman, usually a widow who has brought up her children, to the appointment of women and men trained in personnel work. A good many residence hall administrators feel that vitality, leadership and training in human relations are needed to do a good residence hall job. This is particularly important in case of women's halls, but should not be neglected in the case of men's residences. Too many of the househeads or procurers in men's halls are merely policemen, thus missing a great educational opportunity and obligation.

SIZE OF SOCIAL UNITS VARIES

The size of social units varies considerably, depending somewhat on the educational objective, and perhaps to a greater extent on financial considerations. However, there seems to be general agreement that under normal circumstances a social unit under one househead should not exceed 150 students, and preferably should be fewer than 100. Usually the househead is helped by assistants, frequently students. Several colleges, Oberlin for instance, have introduced a junior advisory system, whereby the juniors are used in freshman halls to assist the househeads. These positions are strictly honorary ones without pay, but are very much desired by the students. It is often felt that in many types of student jobs better job performance can be obtained by making the job an honorary one rather than connect any financial remuneration to it. Incidentally, of course, such a system also would save money.

The housekeeping organization in residence halls, of course, has to contain the necessary custodial personnel, such as maids and janitors. In some of the larger residence hall organizations, these are augmented by carpenters, painters and other tradesmen. The smaller organizations usually rely upon

OPERATING POLICIES

KURT M. HERTZFELD

Assistant to the Treasurer
University of Rochester, Rochester, N.Y.

for RESIDENCE HALLS

Desirable patterns of operation and achievement in regard to the social and educational program, the housekeeping organization, and construction

the buildings and grounds department for trade services. There is a tendency and temptation in almost every operation to become as self-sufficient as possible; where the volume justifies the employment of certain tradesmen, this probably is economically sound.

A good principle to follow is to never employ a sufficient number of trades people to fill all your needs without having to go outside your organization at least from time to time. This will prevent idle hours or make-work jobs which are very costly and demoralizing to the entire staff.

If the housekeeping personnel is directly under the supervision of the director of housing, care should be taken that wage and other personnel policies are closely related to those prevailing for similar jobs in other divisions of the university, especially in buildings and grounds.

SHOULD INCLUDE ALL EXPENSES

Residence halls are usually classified as self-sustaining enterprises within the college financial budget. In order to be actually self-sustaining, income must over a period of years cover, or even somewhat exceed, total expenses, which should not only include the direct operating expenses such as wages, utilities, maintenance and operating supplies but also such overhead items as insurance, depreciation of furnishings and equipment, and administrative expense.

In many instances the residence halls also are expected to cover a building amortization charge. While this charge most probably is justifiable, the cost of new construction in most cases is so high as to make full amortization of the building almost impossible, unless the necessary funds are contributed from pooled profits of other existing residence halls with either no or a much lighter amortization load. The effectiveness of this method of pool-

ing funds, of course, depends on the proportion of old to new housing units. The higher that proportion, the lighter will be the financial burden on the new units. Without a system of pooling it is difficult to see how amortization can be accomplished and full operating cost recovered.

DISTRIBUTING EXPENSES

Expenditures which do not occur regularly each year tend to distort the profit-and-loss picture from year to year unless an attempt is made to distribute the expense over a period of years. This principle has been accepted in the cases of replacement of capital equipment—depreciation charges are now generally included in residence hall budgets.

But there are other expenditures causing a similar problem; painting is probably one of the most significant of these. If the painting schedule is so set up that a certain amount of painting is done in each residence hall each year, actual expenditure for that purpose from year to year might vary very little. If, however, an entire hall is painted every four or five years, the annual profit-and-loss picture would be seriously distorted. Cost would be understated in years when no painting is done, and would be very burdensome in the year when the hall is painted. A simple way to prevent this distortion is to charge each year a predetermined amount for painting to accumulate a painting reserve fund. The actual cost of painting in a given year then can be paid from this reserve and thus will not distort the operating picture.

Standards of housekeeping, maintenance and interior decoration are important considerations in the determination of residence hall operating policy. Certainly, there is little disagreement that college property has to be protected and definite minimum standards of housekeeping established

that cannot be compromised. However, within these limitations the type of use and educational objective in the use of a given facility should influence policy greatly. A game room, for instance, should be conducive to relaxed, informal behavior and should be furnished so that its use in that manner will not cause loss or damage.

It has been observed that a good many of the beautiful lounges, especially in women's residence halls, do not seem to get sufficient use by the students, perhaps because they are furnished and are maintained as show rooms for visitors and not as living rooms for the students. With cost of construction and operation as they are at present, it is essential that we attempt to utilize existing space as intensively as possible, and we hardly can afford luxurious lounges mainly for the occasional visitor. This does not imply by any means that the lowering of standards is to be advocated as a universally desirable step, but it must be realized that physical facilities, to justify their cost of construction and upkeep, must be used as extensively as possible, and that this use in a college must have an educational or social objective.

CONSTRUCTION COSTS VARY

Cost of new residence hall construction varies considerably depending on local cost and codes, size of student rooms, style of architecture, extent of social facilities, and so forth. Figures ranging from \$1600 to almost \$10,000 per student bed have been reported during the past few years. An analysis of the reported cost figures, however, seems to indicate that the typical men's residence hall without dietary facilities costs between \$3500 and \$4300 per student bed and the typical women's residence hall \$300 to \$500 per student bed more. If dietary facilities are provided with the residence hall the per student cost is generally increased by \$400 to \$800.

In the planning of construction immediate economy has frequently to be weighed against economy of maintenance and operation. Wherever possible, maintenance and operating considerations should be the determining factors in the selection of materials and determination of specifications. Stone sills, aluminum windows, tile or glazed block in the bathrooms, adequate maid and janitor closets are only a few examples of construction specifications that reflect themselves in more

efficient operation and less maintenance.

In almost all residence hall construction, the size of the student rooms is the most important single factor that determines total cubic content, and thus, to a large extent, total construction cost. A decision as to the size of the student rooms has to take into consideration the location, size and use of lounges, the living and study pattern of the students, and many other details of student life and building arrangement.

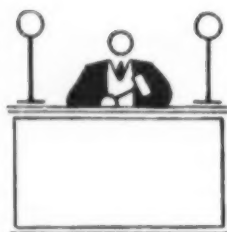
If a residence hall contains sufficient and easily accessible social space and perhaps typewriter and study rooms, the student rooms can be more compact than in a hall where no fa-

cilities are provided in addition to the actual rooms. The National Association of Deans of Men and Women published the following figures on room sizes:

	SINGLE ROOM Sq. ft.	DOUBLE ROOM Sq. ft.
Minimum	108-112	155-165
Average	117-120	182-200
Ideal	140-165	210-225

The same publication contains many other data on residence hall construction and operation. The booklet is called "College Residence Hall" and may be obtained for \$1 by writing to the National Association of Deans of Women, 1201 16th Street, N.W., Washington, D.C., or the National Association of Deans and Advisers of Men, Cornell University, Ithaca, N.Y.

COLLEGE PROFESSOR AND THE LAW OF COPYRIGHT



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DURING ONE OF THE SESSIONS OF A college business management workshop held last summer at the University of Omaha, a student brought a tape recorder to class and recorded the lecture and discussions of Dr. John Dale Russell. Since Dr. Russell was using material based upon his own textbook, "The Finance of Higher Education," the question was raised as to whether the student would have the legal right to transcribe such recordings and later distribute copies to members of his own institution's staff without the express permission of the owner of the copyright of the textbook.

With the anticipated development of educational television and the increasing participation of college professors in radio and television programs, college administrators should review carefully the legal restrictions upon the unauthorized reproduction or publication of literary property. Moreover, many institutions have ac-

quired modern equipment for photographic reproduction of manuscripts, typed and published documents. Accordingly, the hazard of inadvertent reproduction of such materials without the consent of the owner of the document or of the copyright has increased substantially. A survey of current procedures on the typical college campus probably would reveal many violations of the copyright statutes and of the common law right of an author in his unpublished works.

Before the invention of printing with the use of movable type by Johann Gutenberg in 1439, unauthorized publication of manuscripts presented few legal problems. By 1703, the London booksellers were petitioning Parliament to protect their right to copy or publish manuscripts purchased by them from the authors. As a result of this agitation, the first copyright legislation in the world, known as the Statute of Anne, was enacted by

the English Parliament in 1710. This act granted to the author of any book and to his assigns exclusive rights of publication for a term of 14 years. The right could be extended for a further term of 14 years if the author was still living at the expiration of the first term.¹

The federal Constitution (Article I, Section 8) authorized Congress "to promote the progress of science and the useful arts by securing for a limited time to authors and inventors the exclusive right to their respective writings and discoveries." In 1790, Noah Webster, seeking protection for his famous "blue-backed speller," persuaded Congress to make use of this permissive clause of the Constitution. This first federal copyright statute extended protection only to books, maps and charts. In 1802 prints and pictorial illustrations were added, musical compositions in 1831, dramatic compositions in 1856, photographs in 1865, paintings, drawings, sculpture, models and designs in 1870, and motion picture photoplays in 1912. The present law is based upon the Copyright Act of 1909,² with only minor amendments.

In order to obtain the protection of this act, an author, or the one to whom he assigns his rights, must see that the word "copyright" followed by the year and the name of the copyright owner appears on the title page, or its back, of every copy of his book. Two copies of the work, together with an application and fee for registration, must be sent promptly to the Register of Copyrights, Washington, D.C. This registration assures exclusive rights in the publication or other reproduction of the work for a period of 28 years, with the right to renew the copyright for a like period.

Many people are under the impression that they may quote freely from copyrighted material if they merely indicate the extent of the quotation and give due credit. Here, the legal doctrine of "fair use" must be one's guide. Some even assume that they can mimeograph generous excerpts from such works for distribution to students without the consent of the owner of the copyright if they do not sell the material and if they indicate the source

¹Ball, Horace G.: The Law of Copyright and Literary Property, Banks and Company, Albany, N.Y., 1944.

²Shaw, Ralph R.: Literary Property in the United States, Scarecrow Press, 1950.

³61 Stat. 652 (1947) 17 U.S.C. Para 1 (a) Supp. 1951.

of the quotation. Even the gratuitous distribution of an unauthorized abridgement of copyrighted material has been held to be an infringement, sufficient to entitle the copyright owner to an injunction.¹²

"In the absence of any statutory definition of infringement the courts have repeatedly held that copyright infringement consists of actual copying, whether intentional, or unintentional, of some substantial and material part of that which is protected by statute: . . . The copying or printing of a copyrighted work is an infringement irrespective of the fact that no copies have been sold, or that no profits have been made from the sale of copies."¹³

DOCTRINE OF "FAIR USE"

The courts long have recognized what is known as the doctrine of "fair use." This doctrine was evolved in early litigation in which irate authors attempted to bring legal pressure upon those publishing unfavorable reviews of their books. These cases held that, in the public interest, a reviewer might include reasonable excerpts from the work under discussion without violation of the copyright statute. Textbooks, by their very nature, may be quoted freely for direct classroom instruction.¹⁴

"Fair use may be defined as a privilege: in others than the owner of a copyright to use copyright material in a reasonable manner without his consent, notwithstanding the monopoly granted to the owner by the copyright."

"Although the copyright law makes no provision for 'fair use' of another work, the author's consent to a reasonable use of his copyrighted works has always been implied by the courts as a necessary incident of the constitutional policy of promoting the progress of science and useful arts."¹⁵

In order to reduce litigation in this field, in 1935 the joint committee on materials for research of the American Council of Learned Societies and the Social Science Research Council met with representatives of the National Association of Book Publishers Bureau and agreed upon a definition of "fair use." Although without judicial

authority, the agreement has been of persuasive weight in subsequent litigation. It reads as follows:

"A library, archives office, museum or similar institution owning books or periodical volumes in which copyright still subsists may make and deliver a single photographic reproduction or reduction of a part thereof to a scholar representing in writing that he desires such reproduction in lieu of loan of such publication or in place of manual transcription and solely for the purposes of research; provided

"1. That the person receiving it is given due notice in writing that he is not exempt from liability to the copyright proprietor for any infringement of copyright by misuse of the reproduction constituting an infringement under the copyright law;

"2. That such reproduction is made and furnished without profit to itself by the institution making it."

"The exemption from liability of the library, archives office or museum herein provided for shall extend to every officer, agent or employee of such institution in the making and delivery of such reproduction when acting within the scope of his authority of employment. This exemption for the institution itself carries with it a responsibility to see that library employees caution patrons against the misuse of copyright material reproduced photographically."

"Under the law of copyright, authors or their agents are assured of 'the exclusive right to print, reprint, publish, copy and vend the copyrighted work,' all or any part. This means that legally no individual or institution can reproduce by photography or photo-mechanical means, mimeograph or other methods of reproduction a page or any part of book without the written permission of the owner of the copyright. Society, by law, grants this exclusive right for a term of years in the belief that such exclusive control of creative work is necessary to encourage authorship and scholarship."

"While the right of quotation without permission is not provided in law, the courts have recognized the right to a 'fair use' of book quotations, the length of a 'fair' quotation being dependent upon the type of work quoted from and the 'fairness' to the author's interest. Extensive quotation is obviously inimical to the author's interest."

"The statutes make no specific provision for a right of a research worker

to make copies by hand or by type-script for his research notes, but a student has always been free to 'copy' by hand; and mechanical reproductions from copyright material are presumably intended to take the place of hand transcriptions, and to be governed by the same principles governing hand transcriptions."

"In order to guard against any possible infringement of copyright, however, libraries, archives offices, and museums should require each applicant for photo-mechanical reproductions of material to assume full responsibility for such copying, and by his signature to a form printed for the purpose assure the institution that the duplicate being made for him is for his personal use only and is to relieve him of the task of transcription. The form should clearly indicate to the applicant that he is obligated under the law not to use the material thus copied from books for any further reproduction without the permission of the copyright owner."

GET OWNER'S APPROVAL

"It would not be fair to the author or publisher to make possible the substitution of the photostats for the purchase of a copy of the book itself either for an individual library or for any permanent collection in a public or research library. Orders for photocopying which, by reason of their extensiveness or for any other reasons, violate this principle should not be accepted. In case of doubt as to whether the excerpt requested complies with this condition, the safe thing to do is to defer action until the owner of the copyright has approved the reproduction."

"Out-of-print books should likewise be reproduced only with permission, even if this reproduction is solely for the use of the institution making it and not for sale."¹⁷

In April of 1949 the Royal Society of Great Britain also issued a declaration on fair dealing in regard to copying from scientific periodicals, relating to its own publications, but of considerable general importance as a statement in the general field of copyright.¹⁸

¹²The Gentlemen's Agreement and the Problem of Copyright, *Journal of Documentary Reproduction*, II, No. 1 (March 1939), 31-33. See also *Library Journal*, Oct. 1, 1935.

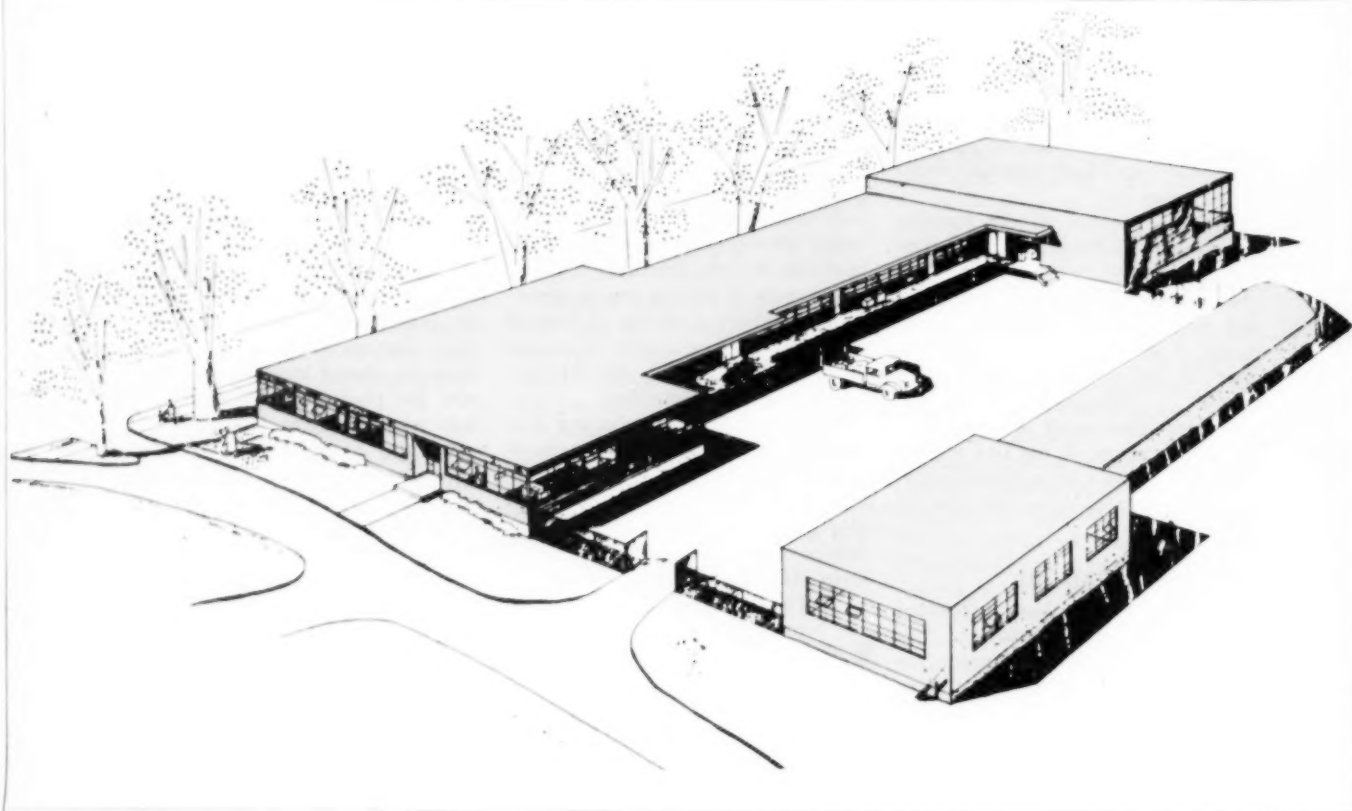
¹³Fair Copying Declaration, *American Documentation*, Vol. 1, No. 22, pp. 112-115, 1950.

¹⁴*Macmillan Co. v. King* 225 Fed. 862 (1914).

¹⁵Ball, Horace G. *Ibid.*, pp. 323, 324. *Chappel & Co. v. Costa* 45 F. Supp. 554.

¹⁶*Oxford Book Company v. College Entrance Book Company* 39 U.S.F.Q. 7 (1938).

¹⁷Ball, Horace G. *Ibid.*, p. 260.



SERVICE BUILDING

to accommodate a small institution

THEODORE BARRY

Business Manager
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Exeter, N.H.

"DON'T USE A SCREW DRIVER FOR A chisel." "Don't drive a screw with a hammer." "Use the right tool for the job." Such clichés as these are a-b-c in maintenance, but their validity is sometimes forgotten when the budgets are set for educational institutions.

Any tool is a means to an end, whether it is a paint brush or the fully equipped paint shop, a pipe threader or the pipe shop, a tire wrench or a three-ton truck. A cramped, poorly equipped carpenter shop is no more efficient than a dull saw or a rusty nail. If the goal of maintenance is

workmanship of good quality, completed with economy of labor and materials, it is necessary to have adequate tools and the building space in which to use them.

The prime reason for the existence of any school or college is its teaching. The supplementary function of plant maintenance is too often relegated to the antiquated classroom building and a disproportionately small slice of the operating budget. The day has long since passed when an educational institution allegedly needed no more of a plant than a log,

with a teacher on one end and a student on the other. Today, efficient classrooms, laboratories, residence halls, libraries and facilities for athletics comprise an important adjunct to the educational process. Not only must these facilities be adequate but their maintenance must be first-rate, both in quality and promptness.

After getting along for many years with makeshift and scattered maintenance shops and services, Phillips Exeter Academy spent four years planning and finally constructing a maintenance services unit made up of a main service building, a garage, and a Quonset storage shed. The total cost was \$214,000. In order that such an expenditure may be considered in terms of other institutions, it may be helpful to outline the size of Exeter and its maintenance operations.

The academy has a student body of 750 students, of which 720 boarding students are housed and fed in academy buildings. Of 90 faculty members, 56 with their families, totaling about 200 persons, live in residence halls and faculty houses. The academy plant includes 22 residence halls, 17 faculty houses, three classroom buildings, a 60 bed infirmary, an administration building, church and art building.

The athletic facilities include a gymnasium, baseball cage, squash courts building, boathouse, 26 tennis courts, 35 acres of athletic fields, and a stadium seating 4000. About three thousand meals per day are served in six dining halls. A boiler plant provides central heating, and the academy operates a laundry and the 58 room Exeter Inn.

The maintenance pay roll totals 192, including 41 maids and janitors, 13 groundsmen, seven carpenters, five painters, eight plumbers and mechanic, two masons, two electricians, three watchmen and four firemen. The dining hall department employs 70 and the laundry 24.

The academy's requirements for maintenance services are perhaps roughly approximate to those of many

of the smaller colleges with enrollments of from one to two thousand.

It was possible to plan service buildings and equipment to meet three major objectives: (1) centralized control of purchasing, equipment and warehouse inventories; (2) efficient planning of maintenance projects throughout the school plant with adequate supervision; (3) cost accounting of labor and materials with a minimum of bookkeeping.

SERVICE BUILDING

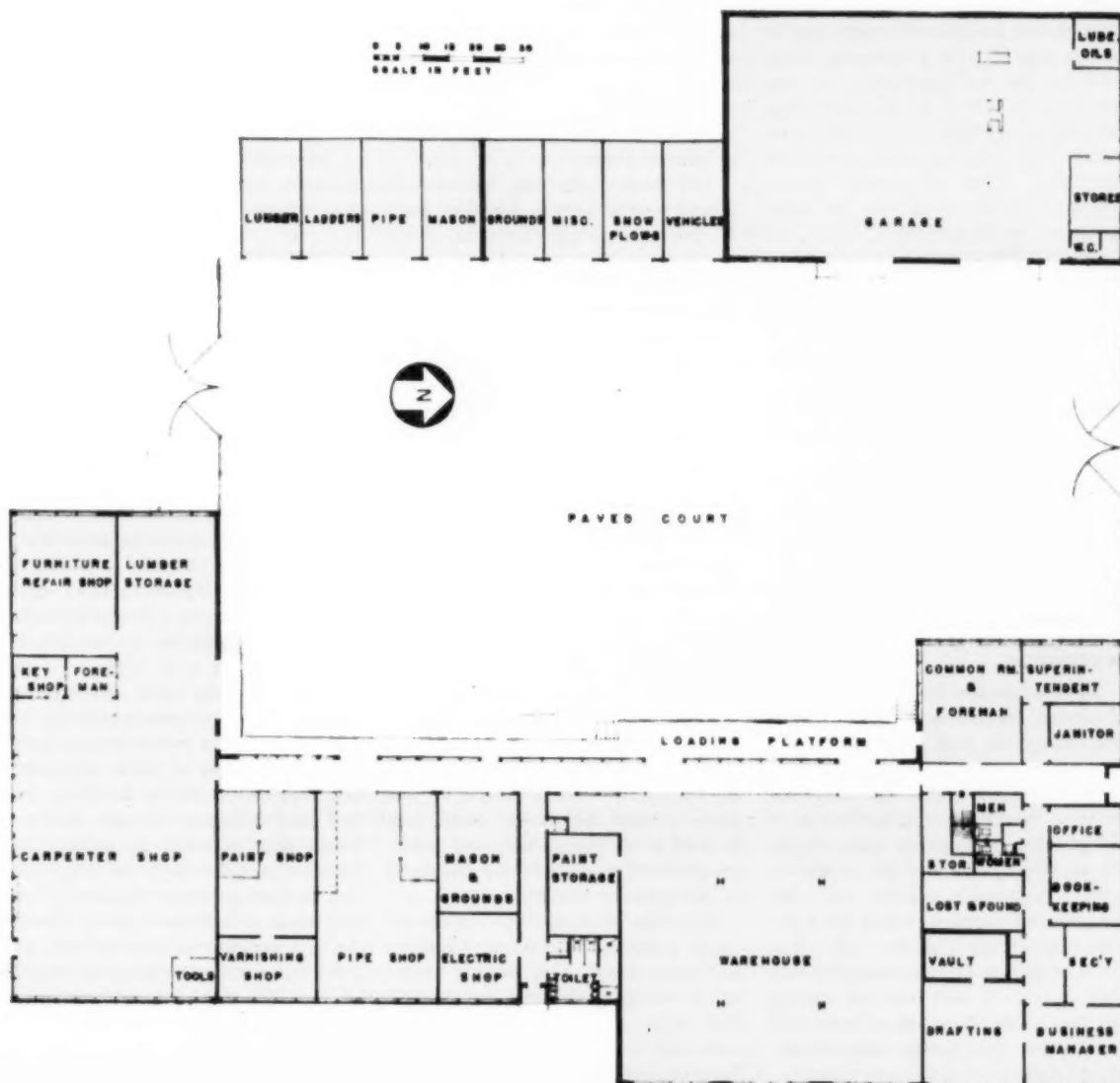
The main service building, with a total floor area of 18,000 square feet, contains the business offices (3400 sq. ft.), the warehouse (2695 sq. ft.), and the maintenance shops (7600 sq. ft.). It is a one-story building with 6

inch concrete block exterior walls and brick veneer. Interior partitions are 4 inch cinder block. The floor is reinforced concrete pad, 4 feet above ground level. The only below-grade area is a 10 by 16 foot pump room which contains two 150 g.p.m. ejectors that handle waste from the service building, garage and laundry.

The flat roof is five-ply tar and gravel over 1 inch of rigid board insulation, laid on a hollow ribbed deck, welded to beams.

In the shop and warehouse areas, heating is by unit heaters suspended from the roof slab. In the offices, fin coils are covered with solid front, slotted sloped metal cabinets.

Above the sash, a 2 foot band of corrugated polished aluminum siding,



set vertically, fills the space between the top of the sash and the roof deck. This aluminum band, backed by an insulation material, constitutes a light load to be carried by the sash, and provides a distinctive and maintenance-free decoration for the exterior elevation.

The floor plan and exterior sash are laid out on a 4 foot module—this unit is determined by the width of a standard industrial type sash. Eighty per cent of the exterior walls is glass, 140 of 180 modules of the perimeter containing sash. This modular scale allows flexibility in rearranging interior partitions if changes in room areas are desired in the future.

The offices are grouped in the north wing of the building and include offices for the business manager, superintendent, head janitor, and bookkeeping. A drafting room also is used for catalog files, samples and other impedimenta that go with purchasing. Adjacent to the drafting room is a fireproof vault, 16 by 12 feet, for filing blueprints. Movable horizontal arms, hung from chains, hold blueprints vertically. Files of related prints, grouped by buildings, can be easily removed and rearranged.

Purchase requisitions from various departments and requisitions for work orders are received in the business office where they are checked, typed and sent out. Job costing of work orders is done in the bookkeeping office, together with the closely related functions of inventory control, pay roll, and the payment of invoices.

A common room provides a place for employees during the lunch hour. It has soft drink, candy and cigaret machines. The room is used extensively for meetings of committees, foremen and department groups.

WAREHOUSE

Since something from the warehouse is needed for nearly every job, it is the connecting link between job orders on paper (originating in the business office) and the work completed by or in the shops. The warehouse, in charge of a manager, is open during all working hours, and any workman with a job order number can sign out required supplies, which are automatically charged to the job. The bookkeeping setup was designed not only to control stock and job costing but also to get items out of stock and on the job with a minimum amount of red tape.

To provide flexible storage for about 5500 items regularly carried in stock, a standard metal shelving unit is used, measuring 7 feet 2 inches high, 36 inches wide, and 18 inches deep. These are set back to back in six double rows, 10 units long. The three-foot shelves are movable, and bin fronts and dividers can be placed where needed to hold plumbing fittings and other unboxed items. The lowest shelf in each section is reinforced on the outer edge so that it can be stepped on to reach the top shelf.

There are only three exceptions to the standard 36 inch shelving unit. Nails are stored in shoe last bins to eliminate open kegs. Shelves 30 inches deep are used for wallpaper. A section of shelves with vertical partitions is constructed of wood for storing sheets of window glass.

A separate vault, with a fireproof door, contains paints, oils, solvents and other inflammables. This room contains 12 standard shelving units and horizontal racks for barrels. It is independently vented through the roof to exhaust fumes.

The rows of shelving bays are arranged so that there is clear floor space 10 feet wide along four walls of the warehouse. This space is used for bulky items, such as tires, pipes, barrels, paper towels, and light bulbs, in cases which are not unpacked for shelf storage.

A total of 150 three-foot units, averaging eight shelves each, provide approximately 3600 lineal feet of shelf storage space.

MAINTENANCE SHOPS

The shop areas are partitioned with wire mesh which facilitates lighting, heating and supervision. Each shop contains one or more locked wire cages in which each foreman stores tools and equipment for which he is responsible. The shop door may thus be left open during working hours.

Six-foot lockers, with master-keyed combination locks, are provided for all employees. These, located in the shops or near the shower room, may be used at all hours. Soap and towels are provided, and towels are laundered in the academy laundry.

There are separate shops for electricians, painters, carpenters, plumbers and steam fitters. One shop is shared by the two grounds crews and masons. The paint shop includes a separate room for varnishing and mixing. In the carpenter shop a small room is in-

cluded for key making and lock repairs. It also includes a shop for furniture repairs, upholstering and shade making. Finished lumber is racked in one end of the shop.

The garage, with a floor of 4000 square feet, has two functions. It provides space for the storage of all academy owned vehicles, and also for their maintenance and repair. A mechanic is in charge, and it is his responsibility to maintain and repair the fleet of 12 trucks and other automotive equipment. The north end of the building has benches, tools, hydraulic hoist, and wire storage cages for lubricants and tools. In addition to maintaining the academy trucks, most of which are half-ton pickups, the mechanic services lawn mowers, rollers, snow plows, and blowers, leaf pickers, and motor launches. There is enough floor space so that mowers, launches and other summer equipment can be overhauled in the winter, and snow equipment can be worked on in the summer, thus maintaining an even balance of repair work the year round.

All trucks are greased on a definite schedule, and emphasis on preventive maintenance has proved economical.

STORAGE FACILITIES

A Quonset building, 96 by 24 feet, of eight 12 by 24 foot sections, provides storage space for seasonal equipment, a ladder pool, and storage for bulky or infrequently moved warehouse items, such as large sized pipe, sand, cement and other supplies used on the grounds. One section is used for storing and seasoning rough-sawn lumber, cut on academy owned woodland during the winter months. When convenient, this lumber is planed in the carpenter shop and stored there.

The entire service unit cost \$214,000 and this investment is considered sound, although it is difficult to determine the dollar value of the return because so many intangibles are involved. There is a real saving in the reduction of loss of tools, equipment and supplies effected by inventory control and adequate storage facilities. Labor time is saved by prompt delivery of supplies from the warehouse and by prompt transportation of men and stock to and from jobs. One of the greatest benefits derived from the service is the improvement in morale of the 150 men and women whose work is made easier and more attractive by the service building and its facilities.

To operate a food service successfully, cultivate

FOOD COST CONSCIOUSNESS

FOOD COST CONSCIOUSNESS AND CONTROL are a responsibility of every worker in the food service. Each, however, has his own particular part to play in the total picture. Food service directors have an intangible potential to save their institutions substantial amounts of money. College food service departments are not E. I. du Pont companies, but a statement attributed to the chairman of the board of that company is probably applicable also to them. Du Pont estimates that the frequency of managerial mistakes involving many thousands of dollars in losses to its company would be appalling, if known. It is extremely necessary, therefore, that the job of management be better done.

The food service director must be a *manager*. He must understand the concept of management and he must know how to plan, direct and control his operations with a high degree of efficiency.

FIVE AREAS OF ACTIVITY

There are five major areas of activity in a food service unit. I think it expedient to touch on these and to indicate later the way in which the managerial function operates through them. These areas are: (1) purchasing; (2) receiving, storing and issuing; (3) menu planning and preparation; (4) service and selling, and (5) management.

1. *Purchasing*. One of the major functions in the operation of the dining hall, and the one where direct or raw material costs begin is that of purchasing. If this function is not carefully carried out, the success of the entire operation is in jeopardy. Most colleges have centralized buying for the entire program through a purchasing agent. In cases where this is the custom, the food service director and the purchasing agent must work

From a paper presented at the 54th annual convention and exposition of the National Restaurant Association, Chicago, 1953.

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closely, as no purchasing agent can buy intelligently unless he *knows* the requirements.

To know the requirements he must have access to the menus and the number of persons to be served to determine the quantities of the various items to be prepared. He must have knowledge of the shrinkage due to butchering and cooking losses. He must have available a complete set of specifications as to the type of merchandise to be purchased, especially meats. Frequent cutting, butchering and cooking tests should be made to determine the most economical size and quality to buy; or it may be more advantageous to buy prefabricated cuts. Once these standards are set they should be religiously adhered to until further tests indicate the need for a change to another set of standards.

Also, to buy intelligently the purchasing agent should be familiar with the current market and therefore in a position to take advantage of competitive offerings. No buying should be done other than on a competitive basis; however, competitive quotations are of no value and often can prove misleading unless they are based on definite specifications as to size, type and quality.

Overbuying and the buying of futures are not recommended for there is no "bargain" in buying large quantities of items that cannot be sold at a profit within a reasonable length of time. Seymour Weiss, president and manager of the Roosevelt Hotel, New Orleans, in speaking at Tuskegee's eighth annual food show in March, said, "I have seen buyers contract for large quantities of slow moving merchandise because a salesman convinced them that they were getting a 'good buy,' only to have it occupy valuable storage space, tie up considerable

capital, and finally be written off as spoiled or unsalable." Certainly there is no economy or food cost consciousness in this kind of a deal.

2. *Receiving, Storing and Issuing*. I have combined these three functions under one heading as it is my feeling that these activities, under the direct supervision of a good storeroom manager, are as important in cost control as any other phase of operation. The purchasing procedure can be only as efficient as the receiving, storing and issuing. There is no guarantee that the dining hall is getting what it is paying for unless each of the jobs is done well.

CHECK QUALITY AND QUANTITY

Receiving. The storekeeper should be impressed with the fact that his work helps protect the interests of the organization. In even the medium and small sized operations, thousands of dollars' worth of merchandise is delivered to the storeroom every month of the year. He should be required to check the quality and quantity of all merchandise received, paying particular attention to the quality of all perishable items. He should be sure that the specifications of size, type and grade are met in strict accord with the purchase order terms. He should verify the count and weight against the vendor's invoice. Any deviation should be taken care of then and there, either by the shipment being refused or by the purchasing agent being contacted to make the necessary adjustment. Receiving reports should be made to the manager regularly and promptly so they can be forwarded to the business office for payment in time for him to take advantage of possible discounts.

Storing. The next step is to keep the merchandise in the best possible condition for issue to the kitchen for preparation. The storeroom should be kept in a clean and orderly fashion. The containers should be right side up

with labels facing the front. The unit cost of the contents of each case or carton should be marked on the outside of the case at the time it is received, and whenever a case is opened the price should be clearly marked on every package, can, bottle or box before it is placed on the shelves. In this way every item in the storeroom bears its unit cost, and as it is issued the price may be recorded on the requisition immediately. This also facilitates inventory taking at the end of the month.

GUARD AGAINST WASTE

Storeroom employees should be made aware of their responsibility as custodians of cash in the form of merchandise. It should be handled just as though it were the contents of a cash register. Care must be exercised to guard against waste and pilferage.

Issues. No issues should be made from the storeroom except on written requisition. This is an important "small task" that can throw the cost picture entirely out of focus if it is not adhered to rigidly. Wherever possible, the walk-in coolers should be built in the storeroom and kept under lock and key just as canned and packaged goods are. Where the coolers are adjacent to the kitchen the cooks form the habit of using the food supplies with the intention of giving written requests to the storeroom manager later. Too often, "later" never arrives, and accurate food costs are impossible unless a daily inventory is taken.

3. *Menu Planning and Preparation.* Food cost is the largest single item on the cost sheet. Naturally the dietitian in preparing her menus must work within the framework set up by the manager. She should be able to get from the storeroom, or the "office," all information about the cost of the food she is planning to serve. These "costs" should be current ones, and a well planned and well managed storeroom will have this information available at any and all times. The menus should be pre-costed, as any food cost system to be effective must tell how much the meal is going to cost rather than how much it did cost. This should be true of the portions as well as the entire batch.

Every dining hall should establish and adhere to standard recipes. There should not be the need to worry whether a 10 pound roast is going to give 25 servings today as against 35 servings yesterday. Here is a case where

I firmly believe the food service director must certainly exercise a high degree of control. This management function is important in every area, but it cannot be overemphasized in the area of food preparation. It is easy to say that foods must be cooked slowly and at low temperatures to avoid waste and shrinkage, but any manager who is interested in food cost control is going to spend some time in the kitchen. The purchase of high quality raw foods at the lowest possible price is going to mean very little if that food is "ruined in the pot" or cooked in such quantities as to result in waste and leftovers.

4. *Service and Selling.* Closely allied to menu planning and preparation is the necessity for establishing standard portion sizes. The personnel whose responsibility it is to serve or sell must be made aware of the fact that there is a direct relationship between food cost and the size of portions served.

5. *Management.* The discussion up to this time has been pointed at the specific functions within the food service department as if they were separate and distinct operations. They are separate functions, but in any manufacturing industry (and a dining hall is certainly a manufacturing plant) all of the activities of production—men, money, machines, materials and the methods—must be coordinated. *That is the job* of the food service director. He must be a manager. The manager of a food service department, like any other business administrator, has three major duties to perform. He must *plan*; he must *direct*; he must *control*.

LIKE MILITARY CAMPAIGN

Planning. The words "plan" and "planning" are commonplace words and often are used loosely. Frequently one tells you of his "plan" which is little more than a decision regarding the routine operations of a single day. But planning for the operation of a food service establishment is similar to planning a military campaign. A whole series of movements must be worked out in advance. This planning must take into account (anticipate) the need for making adjustments in the operating routines in light of daily developments. William H. Newman in his book "Business Policies and Management" says that a good business plan usually involves *three* factors: (1) It covers a relatively long period of time; (2) it is usually necessary to describe a whole series of activities to

be performed in accomplishing the desired objective, and (3) it gives effect to numerous factors that will arise during its execution. By having a plan, the food service director can anticipate crises and be prepared to meet them; he can avoid unnecessary delays in service, and can effect economies of operation.

Direction. The second major activity of the manager is direction. Direction is ordering. Ordering is putting things in condition. The manager then, through people and with equipment, is getting the job done. Perhaps more important than the technics of handling the stoves, the ovens, and beef roasts are the technics of handling people. Every business enterprise—and the college dining hall is no exception—is a cooperative effort in which members of a group must work *together* to obtain the benefits of their combined efforts. The food cost control system may be "A-1" on paper but, unless the manager is one who handles people well, you may as well "dump" the system in File 13.

CONTROL THROUGH FACTS

Control. The food service manager must exercise control over the activities of the persons to whom he gives directions. To accomplish this he must know what all employees are doing and must be in position to change their activities whenever and wherever they are not in keeping with the plans of the organization. In other words, to exercise control the manager must have facts. He may get these facts by walking throughout the kitchen, the pantry, the storeroom, and other areas and personally inspecting the work of the employees. He may have scheduled conferences with the employees. He may require them to submit reports periodically covering their activities, or he may use any combination of these methods. The important thing to remember is that we can control activities through facts—we cannot control people.

No food cost control system will be effective if the food service director is the only one in the organization who is food cost conscious. All of the workers in purchasing, receiving, storing, cooking and selling must see and recognize the importance of their respective functions.

It is the manager's job to plan, direct and control the activities of his organization so as to produce the desired results.

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NEWS

**College's TV Earnings Subject to Income Taxes . . . Settle Piedmont's
Dispute Over Monthly Grant . . . Maintenance Employees Strike . . . Survey
Colleges on Group Insurance . . . Selective Service Test November 19**

Iowa State's TV Station Subject to Income Taxes

DES MOINES, IOWA.—The Iowa State Board of Education was advised recently that under a federal internal revenue ruling WOI-TV, Iowa State College's television station, is subject to income tax liability.

Attorney Marion Hirschburg of Ames, employed to investigate the college's income tax status on the advice of the state's attorney general's office, reported to the board at the open hearing that the revenue department contends that WOI-TV earnings from commercial programs are not related to educational activities at the college. Therefore, the government argues, these earnings are taxable.

The attorney recommended to the board that a test case be brought before the U.S. Tax Court, and the board is reported to have taken this recommendation under advisement. Attorney Hirschburg stated that the income from commercial programs amounts to approximately \$500,000 a year. He stated this figure doesn't make any allowance for rent, depreciation, insurance or other items that private enterprises are allowed to deduct.

Long Dispute Over Funds Settled at Piedmont

DEMOREST, GA.—According to Dr. James E. Walter, president of Piedmont College, the institution opened a new term this year after scoring what he called a triumph of principles over pressure. For the last three years the campus has been embroiled in a controversy resulting from the college's acceptance of a \$500 monthly grant from the Texas Education Association, whose founder had been accused of anti-minority feelings.

The dispute reached a climax this summer, when the Congregational Christian Churches suspended their

\$1250 annual grant to the college. At the same time, the Demorest city council sought to have the president dismissed and townspeople and students took sides in the dispute.

Dr. Walter said that the matter of the Congregational Christian Churches' grant had been misrepresented. He said the church affiliation had not been "dropped" as reported by a church spokesman, but that the grant had been withheld and put in escrow pending the school's satisfying "certain conditions." These conditions, he said, were that the college select a trustee recommended by the church's Southeastern Convention and that the Southeastern Convention secretary serve as a trustee, according to tradition.

New Trend in Awarding College Scholarships

NEW YORK.—According to a recent study by the *New York Times*, the trend in recent years has been away from the traditional method of awarding college scholarships in amounts equal to the tuition. The new approach is to fit the scholarship to the individual need. In some cases it might be as little as \$100, or it may amount to \$1500.

According to the study, the new trend is in evidence in some of the larger institutions in the East, such as Harvard, Princeton, Yale, Dartmouth and Columbia. As yet they have not decided on definite standards.

In an attempt to measure the financial needs of the applicants, investigating boards are delving deeper into how much the young man has saved, how much he has received from his parents or relatives, and the amount he is capable of earning. His father or mother must disclose income, present and anticipated, assets from all sources, business expenses, indebtedness, and in some cases must produce a copy of his federal income tax return.

Announce Results of Insurance Survey

PITTSBURGH.—George W. Armstrong, office manager and director of personnel at the University of Pennsylvania, recently announced the results of a questionnaire survey in regard to group life insurance procedure in colleges and universities. He reported that questionnaires had been sent to 53 colleges and universities, both state supported and privately endowed. The responses were gathered from 83 per cent of the institutions contacted. Of the group replying, 52 per cent reported providing group life insurance for all employees whereas 42 per cent did not.

Results of the survey revealed that the formulas used are varied but, in general, the basis is salary, with a minimum of \$5000 and a maximum of \$30,000 for administrative officers and instructional staff; for other employees a salary with a minimum of \$1000 is carried. The survey revealed that group life insurance is handled through insurance companies with 70 per cent of the group plans on a compulsory basis. Eighty-three per cent of those reporting indicated the group plan is a participating one and the annual monthly premium per thousand paid by employees is 60 cents and the average gross premium per thousand paid by the institution ranges from 74 cents to \$1.79.

All institutions reporting stated that group life insurance is discontinued upon termination of employment, but that conversion to ordinary forms of life insurance is permitted.

The institutions reporting to the survey stated that of those employees retiring with a pension, 60 per cent of the institutions terminate group life insurance unless it is converted by the retiree, whereas 40 per cent do not. Of those institutions that do not terminate group life insurance upon re-

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NEWS

retirement of the employee, 20 per cent continue insurance in full amounts, 70 per cent at \$1000 and 10 per cent at a \$2000 maximum. Sixty per cent of the institutions pay the full cost of continuing insurance; the remainder of the institutions require part payment prior to the retirement period.

To Train Students for Community Leadership

NEW YORK.—Teachers College, Columbia University, announced recently

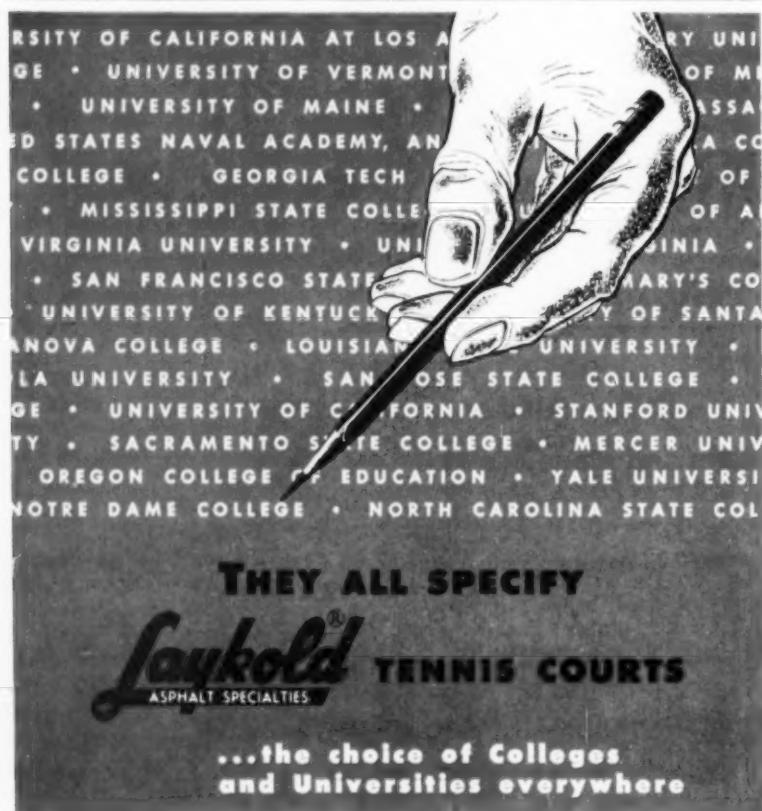
a major change in the program of its second largest department, educational administration.

The department of educational administration has been revamped and enlarged over the last three years at a cost of \$1,000,000 in order to make way for the new program. The purpose of the program will be to train students primarily for community leadership rather than merely as school administrators. Among the many features in the new curriculum are revised

classroom instruction, particularly on the doctorate level; enlarged opportunities for field work, and new research facilities.

It was noted that the curriculum would place heavier emphasis on field experience. Students will participate in school surveys, serve internships in the offices of superintendents of schools, and engage in research into administrative problems.

The program seeks to produce school administrators who will be skilled in dealing with parents and other community groups, the press, and broad management problems that are not restricted to the individual school.



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Tucson, Ariz. Seattle, Wash. Baton Rouge 2, La. St. Louis 17, Mo. Inglewood, Calif.
Oakland 1, Calif. Portland 7, Ore. Washington 6, D. C. San Juan 23, P. R.

Maintenance Employees Strike in Labor Dispute

BRONXVILLE, N.Y.—The opening of the fall term at Sarah Lawrence College was inconvenienced by the strike of 12 maintenance employees at the institution. The strike was quickly settled after a few days, Dr. Harold Taylor, president of the college, declared.

The strikers included porters, janitors, carpenters, gardeners and furnace attendants, who picketed the college as students arrived for the fall term. Truck drivers delivering trunks and foodstuffs refused to cross the picket line with the result that students and faculty carried on in the emergency. The dining room and kitchen staffs remained at work during the strike.

According to newspaper reports, the dispute stemmed indirectly from the death of Thomas F. Lewis, former president of Local 32-E Building Service Employees International Union, A.F.L., which represents the employees of the college. Dr. Taylor reported that the college had reached an oral agreement with Mr. Lewis before he was killed a month earlier but a disagreement arose when it came time to put the pact into writing. The college said that a 40 hour week, maintenance of union membership, pay increases, longer vacations and other benefits had been agreed upon last June but that in September the union demanded that the college agree to hire all service personnel from union rolls. Under the contract now signed, the college retains the right to hire replacement employees of its own choice, rather than limiting replacements to a list submitted by the local.



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NEWS.

Harvard President Says "Grow Through Reading"

CAMBRIDGE, MASS.—Dr. Nathan M. Pusey in his first talk to a student group as president of Harvard University addressed freshmen with "our interest here is to read books not to burn them." He added that only by learning to read books regularly, and to buy them whenever possible, could education progress in proper fashion and college students "grow in spirit and understanding."

Dr. Pusey told the freshmen they should not suppress a desire to make over the world. While this generation of college students might be "too wise, too close to those recently burned," to give itself quickly to easy enthusiasm, Dr. Pusey added that it would be a tragic lack not to have a compelling urge to better things. He stated that Harvard has never subscribed to "the heresy that you can learn without books."

First Negro Enrolled at Virginia Polytechnic

BLACKSBURG, VA.—According to a recent announcement by Walter Newman, president of Virginia Polytechnic Institute, the first Negro undergraduate to be accepted at an all-white state supported institution in Virginia is Irving Linwood Peddrew, who is enrolled as a day military student. He is permitted to eat off campus as do all other military students. He is taking courses leading to a degree in electrical engineering.

The V.P.I. board of visitors approved his application because no state supported school for Negroes offers electrical engineering training "in comparable form and substance." The board acted on the advice of Attorney General J. Lindsay Almond Jr., who said rulings of the Supreme Court have taken precedence over Virginia laws on the subject of racial segregation in higher education.

Negro at Louisiana

BATON ROUGE, LA.—Louisiana State University enrolled its first Negro student as A. P. Tureaud Jr. met its final details of registration. The student is the son of a New Orleans lawyer and gained admission through a series of court orders at both state and federal levels. He is said to be the first Negro to be admitted to a southern undergraduate school.

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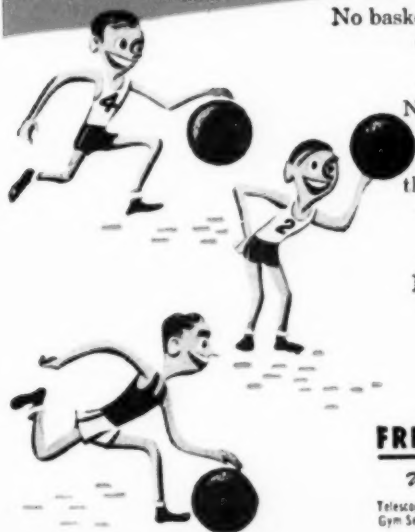


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NEWS

\$10 Million in Gifts to N.Y.U. for Record Year

NEW YORK.—New York University spent \$31,866,551 for its total educational research and public service programs during the 1952-53 year ended June 30, Dr. Henry T. Heald, chancellor, reported at the first fall meeting of the university's governing council. This figure was more than \$2,000,000 higher than the amount the university has spent in any previous year.

Operating income from all sources, including tuition, fees, gifts, grants, bequests, and contract research, totaled \$31,624,232. Of this total, 52.5 per cent came from tuition.

Industrial and governmental contracts and other grants for research accounted for \$5,478,356 of the total university expenditure. The remainder was spent for instruction, university-financed research, medical care in the university's hospitals and clinics, and other community services.

"The deficit for the year was \$242,319, which, because of careful financial management and gifts for current use, was less than the deficit we budgeted for the year," Dr. Heald reported.

Dr. Heald referred to the gift record of \$10,001,461 as "the financial bright spot of the year." The university received that sum in gifts, grants and bequests during the year, an amount nearly 67 per cent higher than the previous record of a year ago.

University endowment during the year rose from \$19,000,000 to \$21,000,000, and the value of land, buildings, equipment and buildings under construction increased from \$35,000,000 to \$42,000,000, Dr. Heald reported.

Three Armour Men Study Uruguay's Industries

CHICAGO.—Armour Research Foundation of Illinois Institute of Technology will extend its technological experience and services to the South American republic of Uruguay under a contract just signed with that nation.

Three Armour Research Foundation experts departed September 27 to conduct a preliminary technological audit of the country.

Much as an auditor examines a company's financial situation, the foundation officials will examine Uruguay's industries and resources. They will study means to improve existing industries and the possibility of establishing new ones through the application of research and engineering technology. The investigation will be carried out with a view toward creating in Uruguay an independent industrial research institute to serve the techno-economic needs of the country.

This Armour research team consists of Thomas P. Collier, Irving D. Canton and Layton C. Kinney.

Moscow University Opens

MOSCOW, U.S.S.R.—The government announced recently that Moscow University's "temple of learning" had been completed in time for fall classes. *Pravda*, the Communist party newspaper, called it one of the world's largest universities and quoted its president, Ivan Petrovsky, as saying the floor space and acreage were greater than that of New York's Columbia University.

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— are always enjoyed by bathers in Powers Thermostatically Controlled showers. Water temperature stays where the user wants it. There's no danger of slipping and falling while trying to dodge an unexpected shot of cold or hot water.

Labor Costs no more to install a quality shower mixer. Powers mixers cost more. They're worth more. They're Safe 3 ways.

1. No unexpected shots of hot or cold water caused by pressure or temperature changes in water supply lines;
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BEGIN WHERE COOKING
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When you have hot foods, hot soup, hot coffee to be serviced a distance from your kitchens . . . THAT'S WHERE PORTABLE AerVoid VACUUM INSULATED HOT FOOD AND LIQUID CARRIERS COME IN.

AerVoids begin where cooking kettles and coffee urns, leave off. They provide a means by which the output of stationary cooking equipment can readily be transported and serviced at points distant from your kitchens . . . expediting service, saving time, money, labor.

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NEWS.

Selective Service Test for Students Nov. 19

WASHINGTON, D.C. — Maj. Gen. Lewis B. Hershey, director of Selective Service, has announced that the fourth series of college qualification tests will be given on Thursday, November 19, and Thursday, April 22, at more than 900 testing centers.

Approximately 483,000 students have already taken the test. Well over half a million students will have been tested by next spring. Students currently deferred on the basis of test scores or class standards number approximately 162,000.

Students whose academic year will end in January 1954 have been urged to take the November test so that they will have a test score on file at their local boards before the end of their academic year, at which time their boards will reopen and reconsider their cases to determine whether they should be deferred as students.

Applications for the November 19 tests must be postmarked no later than midnight Monday, November 2. Applications postmarked after midnight cannot be accepted for that test.

To be eligible to apply for the Selective Service tests the student must: (1) intend to request deferment as a student; (2) be satisfactorily pursuing a full-time course of instruction, and (3) must not previously have taken the qualification test. The present criteria for deferment as an undergraduate student are either a satisfactory score (70) on the qualification test or specified rank among the male members of the class (upper half of freshman class, upper two-thirds of sophomore class, or upper three-fourths of junior class).

Students accepted for admission to or in attendance at a graduate school prior to July 1, 1951, satisfy the criteria if their work is satisfactory. Graduate students admitted or attending after July 1, 1951, must have ranked among the upper half of the male members of their senior class or make a score of 75 or above on the qualification test.

General Hershey has emphasized many times that these criteria are merely flexible yardsticks, and it is not mandatory for local boards to follow them. The standards may be raised or lowered any time in accordance with manpower demands.

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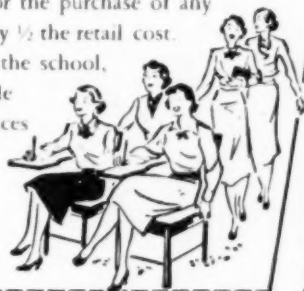
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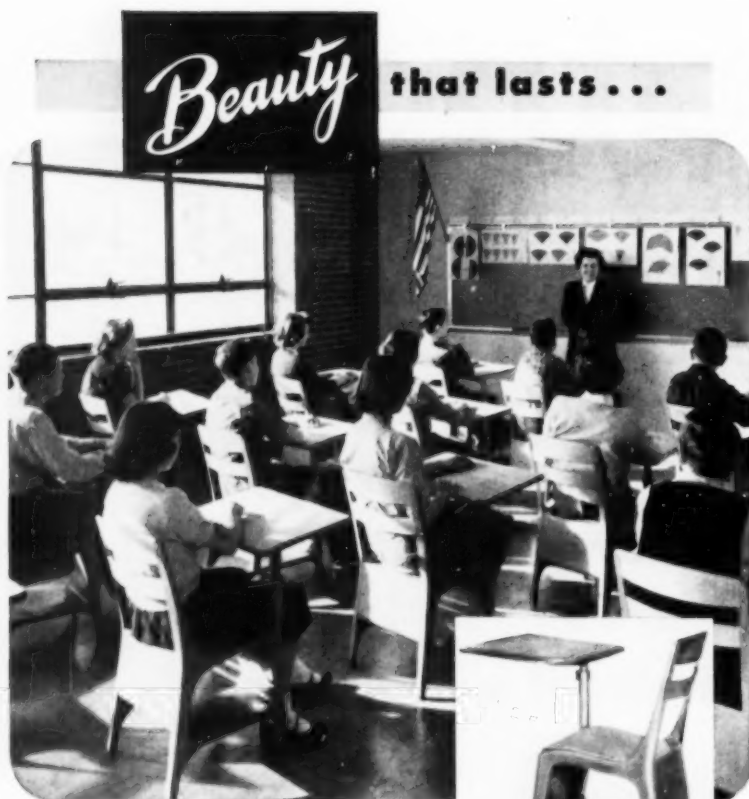
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NEWS.

Monmouth College Banned by Catholics

MONMOUTH, ILL.—Bishop William E. Cousins of the Peoria diocese of the Roman Catholic Church has placed Monmouth College off limits as an educational institution for students of the Roman Catholic faith.

Bishop Cousins' ban was based on Monmouth's requirement that all students attend daily chapel services and have five hours of scholastic credit in a Bible and religion course.

Of the 550 students registered at Monmouth College last year, 28 were Catholics. Monmouth is governed by the United Presbyterian Church, which supplies \$20,000 of an annual operations budget of about \$700,000.

NAMES IN THE NEWS

James P. Hart, chancellor of the University of Texas for the last three years, recently resigned the position in order to enter private law practice in Austin, Tex. The resignation will become effective on January 1.

Norman S. Buck, dean of the freshman year at Yale University, has been named associate provost of the university, according to a recent announcement by Dr. A. Whitney Griswold, president. Mr. Buck, who will continue as dean, assumed his new duties October 1. Edgar S. Furniss is university provost.

Henry A. Dixon, president of Weber College, Ogden, Utah, has been named to the presidency of Utah State Agricultural College in Logan, succeeding Dr. Louis L. Madsen. Dr. E. G. Peterson has been serving as acting president since April.

Leslie F. Robbins, formerly purchasing agent of the University of Colorado, Boulder, has been named service manager of the University Memorial Center. His assignment became effective in September. In his new position, Mr. Robbins will supervise and coordinate the business operations in the new center, including budgets, handling of funds, purchases, building and maintenance. He will be responsible to Lisle Ware, director of the memorial center building.



Leslie F. Robbins



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NEWS

Louis L. Madsen, former president of Utah State Agricultural College, has been named by Secretary of Agriculture Ezra Taft Benson to be head of the beef cattle section, bureau of animal industry, U.S. Department of Agriculture. Dr. Madsen will move to Beltsville, Md., headquarters of the National Agriculture Research Center.

Dr. Douglas McGregor, president of Antioch College in Yellow Springs, Ohio, will leave the college next year to accept a professorship in the new

school of industrial management at Massachusetts Institute of Technology. His resignation becomes effective next July 1. Before going to Antioch five years ago he had been director of the industrial relations section at M.I.T. for three years.

Carter Harrison, formerly associated with Houghton-Mifflin Co., has been named sales manager of the University of Chicago Press.

Rev. Brother William H. Barnes has been named to succeed the **Rev. Brother**

Arthur A. Loftus as president of Iona College, New Rochelle, N. Y.

Rev. John Joseph Long, S.J., was recently named president of the University of Scranton, Scranton, Pa. He will succeed the **Very Rev. J. Eugene Gallery**, president since July 1947.

Rev. William J. Glavin, treasurer of Niagara University, New York State, since 1943, has been named treasurer of St. Joseph's College, Princeton, N.J.

Brother Augustine Philip, executive vice president of Manhattan College, New York, has been appointed president of the college to succeed **Brother Bonaventure Thomas**. Brother Thomas has been transferred to LaSalle College in Philadelphia for a special assignment.

Frank Flynn of San Francisco has been named business manager of St. Mary's College of California. He succeeds **William Milliken**, who resigned in order to devote his entire time to a business venture in the area.



Alfred S. Dale

Alfred S. Dale Sr., former treasurer of the state of North Dakota, has been named business manager of the College of the Pacific, Stockton, Calif. He succeeds **James Blair**, who has resigned to return to Tennessee, where he will be a member of the staff of the Nashville General Board of Education.

Father Zeman, treasurer of the University of San Francisco, has been named treasurer of the University of Santa Clara to succeed **Father Watson**. Father Watson will remain on the university staff.

Burt E. Ashman, formerly assistant business manager at Drake University, Des Moines, Iowa, has been named assistant to the president in charge of business management at Pennsylvania College for Women, Pittsburgh, according to a recent announcement by **Paul R. Anderson**, president of P.C.W.



Burt E. Ashman

Edgar Whiteman, dean of men at Spring Arbor Junior College, Spring Arbor, Mich., was recently named president of Central College, McPherson, Kan. He succeeds **M. B. Miller**,



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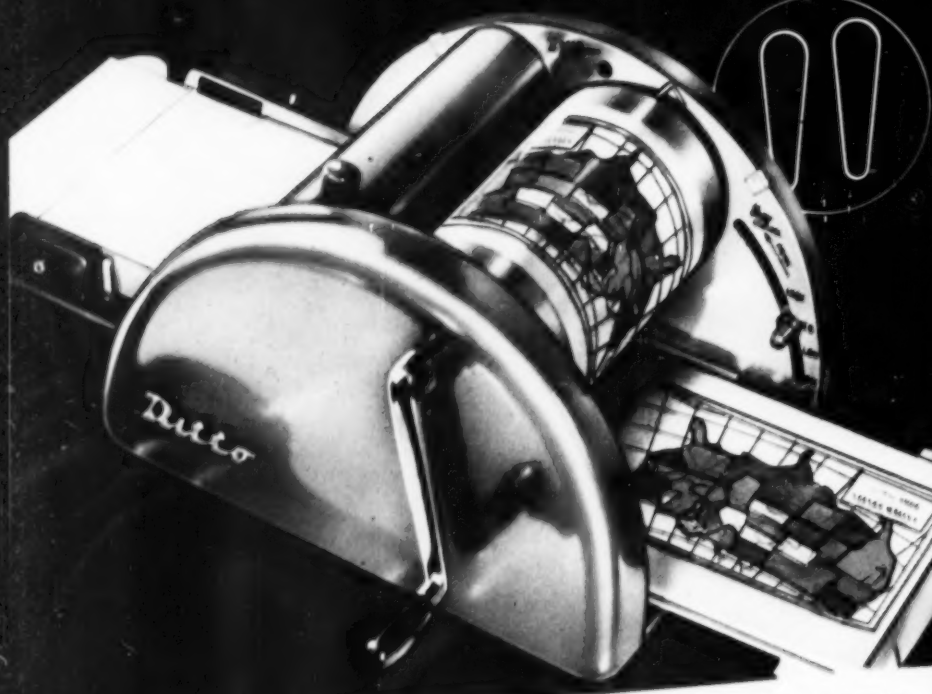
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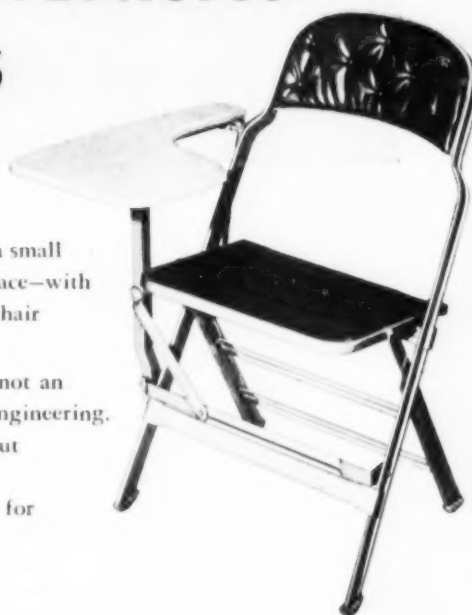
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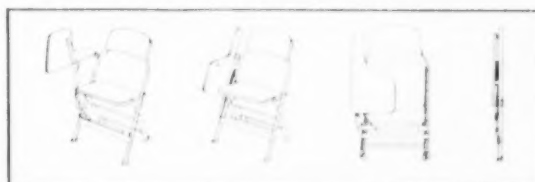
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NEWS

who resigned to accept the chairmanship of the department of business and economics at Seattle Pacific College.

William H. Conley, vice president in charge of instruction at Seton Hall University, South Orange, N.J., was recently named assistant to the president of Marquette University, Milwaukee.

Mrs. Helen E. Righter has been appointed office manager and assistant to the director of the Institute of Design at Illinois Institute of Technology, Chicago. Mrs. Righter was formerly an assistant to the manager of a Chicago management consulting firm and from 1946 to 1950 was an instructor of English at the University of Denver.

Harvey V. Higley, administrator of Veterans Affairs in Washington, recently announced that **Henry W. Longfellow**, former executive assistant to the assistant administrator for legislation, has been named to the new post of assistant administrator for administration. He will be responsible for personnel, purchasing and housekeeping activities. **Edward D. Odom**, acting general counsel, and **Frank W. Kelsey**, acting controller, have been appointed to those positions on a permanent basis.



Ilee Smith

food service at Coe College, Cedar Rapids, Iowa. Prior to her work in Indianapolis, Miss Smith had been manager of food service at Morehead State Teachers College, Morehead, Ky., and earlier had been director of co-operative dormitories at Iowa State College, Ames.

Sister M. Fredericus, O.P., succeeds **Sister Mary Aurelia, O.P.**, as dean of Rosary College, River Forest, Ill.

Dr. Laurence McKinley Gould, president of Carleton College, Northfield, Minn., has been appointed by President Eisenhower to the National Science Board of the National Science Foundation. Dr. Gould will fill out the term of **Dr. James B. Conant**, which expires May 10, 1956. Dr. Conant, president of Harvard University, resigned when he became High Commissioner for Germany.

Ilee Smith, former assistant manager of the employee cafeteria at L. S. Ayres and Company, Indianapolis department store, has been named director of



Weimer K. Hicks

and will take office there on January 1. He succeeds **Dr. John Scott Everton** at Kalamazoo. Dr. Everton became president in 1949 and served until his appointment as educational representative of the Ford Foundation in Burma in February of this year. Since that time, **Dr. Harold T. Smith**, vice president in charge of business affairs, has been the college administrative head.

Dr. Charles J. Armstrong, vice president and dean of the faculty at Whitman College, Walla Walla, Wash., was recently elected president of Pacific University, Forest Grove, Ore., where he will succeed **Dr. Walter C. Giersbach**, who resigned the position last spring. Dr. Armstrong becomes the 11th president to serve the university since its founding more than a century ago. His appointment became effective October 1.



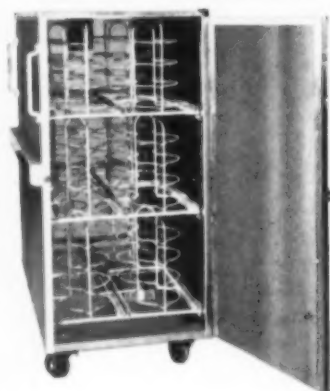
Charles J. Armstrong

Dr. Ralph A. Phelps has been named president of Ouachita Baptist College, Arkadelphia, Ark. He succeeds **Dr. Harold A. Haswell**, who resigned to become executive coordinator of Texas Baptist Colleges.

Roy S. Christie has been appointed assistant to the president in charge of development at Wells College, Aurora, N.Y., according to a recent announcement by **Louis J. Long**, president. Mr. Christie is a member of the firm of Ketchum, Inc., in Pittsburgh and will assist the president and trustees in raising \$1,300,000 for a new student union building during the coming year.

Dr. Eugene A. Waters, dean of the University of Tennessee Graduate School, and **Dr. Andrew D. Holt**, administrative assistant to the university president, were named vice presidents of the university by the board of trustees at its annual meeting in Knoxville. In making the appointments, the board created a third vice presidency for the university. **Dr. O. W. Hyman**

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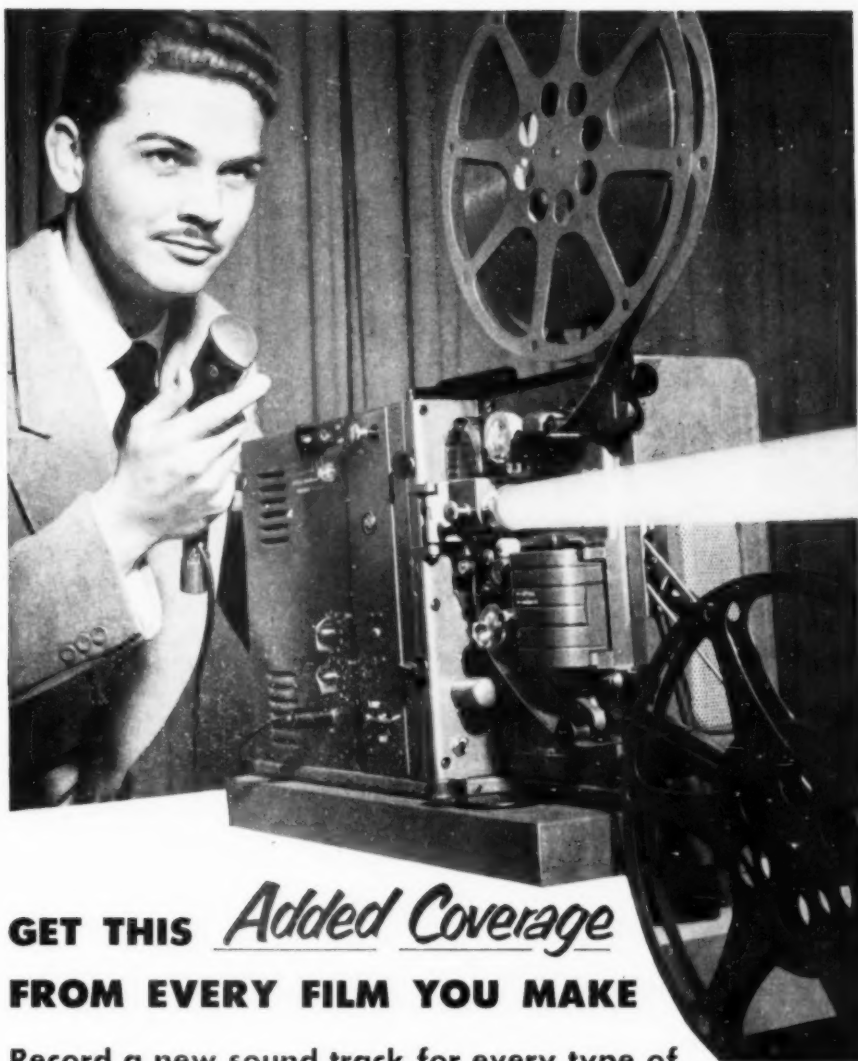
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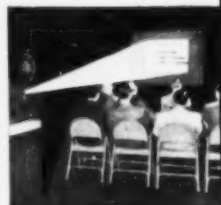
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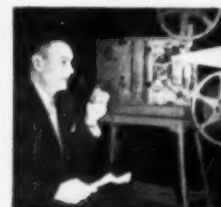
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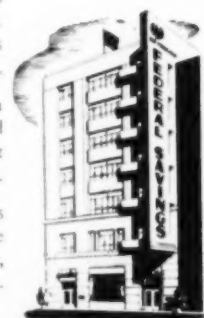
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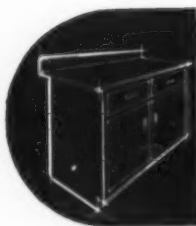
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NEWS.

continues to serve as director of the university's medical units in Memphis.



E. Kirk Badgley

E. Kirk Badgley, member of the Montana State University teaching faculty and administrative staff since 1924, has been appointed controller of the university. He succeeds James B. Speer, who retired after several decades of service to the university. Mr. Badgley has served in recent years as university auditor and assistant controller and holds the rank of professor on the university faculty.

Claude E. MacIntyre, formerly assistant superintendent of maintenance at the A. C. Tower Company, Roxbury, Mass., is now superintendent of maintenance and power at Perkins Institution and Massachusetts School for the Blind at Watertown, Mass. Mr. MacIntyre has had more than 20 years of experience in power development and the supervision of buildings and grounds maintenance in industry, real estate management, agriculture and the navy.

Dr. Victor P. Morris has been selected as acting president of the University of Oregon. Dr. Morris, chairman of the board of deans at the university, asserts that he is not a candidate for the presidency.

Miriam Huffman

recently was appointed dietitian at Wilmington College, Wilmington, Ohio. Miss Huffman was formerly assistant foods manager at Pomerene Hall refectory at Ohio State University.



Miriam Huffman

Dr. Robert A. Moore, dean of the medical school at Washington University, St. Louis, has been named vice chancellor in charge of the schools of the health professions at the University of Pittsburgh. In his new position, Dr. Moore will coordinate teaching, research and patient care in the hospitals, clinics and professional schools of medicine, dentistry, pharmacy, nursing and public health.

Frederick D. Kershner, president of Texas Christian University, Fort Worth, from 1911 to 1915, died re-



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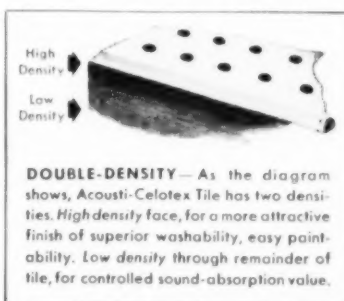
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NEWS.

cently at the age of 80. He was dean emeritus of the school of religion at Butler University, Indianapolis, at the time of his death.

Rev. Robert Michael Kelley, S.J., former president of Regis College, Denver, died recently at the age of 76. He was president of Regis College from 1920 to 1926 and from 1935 to 1942. In the interim, he also served as president of Loyola University in Chicago.

Frederick Charles Hicks, former president of the University of Cincinnati, died at the age of 90 years. He was university president from 1920 to 1929.

Dr. Vivian Thomas Smith, dean and acting president of the College of the Ozarks, Clarksville, Ark., was killed recently in an automobile accident near Vale, Ore. He was returning home from a vacation with his daughter and son-in-law, Mr. and Mrs. Harvey Sherer. Mr. Sherer is assistant business manager of Oregon State College at Corvallis. Dr. Smith had been president of Upper Iowa University, Fayette, for 14 years before accepting the College of the Ozarks appointment.

DIRECTORY OF ASSOCIATIONS

National Federation of College and University Business Officer Associations

President: Irwin K. French, Wellesley College; vice president: Gerald D. Henderson, Vanderbilt University; secretary-treasurer: Nelson A. Wahlstrom, University of Washington.

Association of College Unions

President: Louis Day Jr., University of Pennsylvania; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 25-28, Edgewater Beach Hotel, Chicago.

National Association of Educational Buyers

President: Forrest Abbott, Barnard College; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y.

Convention: May 5-7, Huntington Hotel, Pasadena, Calif.

Association of Physical Plant Administrators of Universities and Colleges

President: Sam Brewster, Alabama Polytechnic Institute; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Association of College and University Business Officers

American Association

President: J. B. Cephas, Virginia State College; secretary: L. H. Foster Jr., Tuskegee Institute.

Convention: May 2-4, Lincoln University, Jefferson City, Mo.

Central Association

President: Jacob Taylor, Ohio State University; secretary-treasurer: T. N. McClure, Knox College.

Convention: April 25-27, Oklahoma A.&M. College, Stillwater.

Eastern Association

President: F. Morris Cochran, Brown University; secretary-treasurer: Irwin K. French, Wellesley College.

Convention: Nov. 29-Dec. 1, Washington, D.C.

Southern Association

President: J. H. Dewberry, University System of Georgia; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Western Association

President: George W. Green, California Institute of Technology; secretary: Duncan McFadden, Stanford University.

American College Public Relations Association

President: Mrs. Veta Lee Smith, Marshall College, Huntington, W.Va.; executive secretary: Marvin W. Topping, 726 Jackson Place, N.W., Washington 6, D.C.

Convention: June 21-24, Hotel Roosevelt, New York City.

National Association of College Stores

President: R. C. Avery, Cornell Campus Store, Ithaca, N.Y.; executive secretary: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

College and University Personnel Association

President: Max W. Sappenfield, University of Indiana Medical Center, Indianapolis; secretary-treasurer: Clara Stimson, University of Rochester; executive secretary: Donald E. Dickason, University of Illinois. Permanent headquarters, 809 S. Wright St., Champaign, Ill.

Convention: August 1954, University of California and California Institute of Technology.

National Association of College and University Housing Officers

President: Kenneth D. Lawson, Michigan State College; vice president: M. R. Shaw, Cornell University; secretary-treasurer: Ruth N. Donnelly, University of California, Berkeley.

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NEW

White Label

The newest addition to the Presto line. Both surfaces are warranted to be useable without breaking sapphire cutting stylus. Ideal all-purpose disc.

The choice of the right recording disc for every job is not difficult if you'll stop reading conflicting claims and listen to the experts. The nation's top recording engineers say PRESTO discs are best for performance, permanence and price.

After you have made the important choice of brand... select the proper *grade* PRESTO disc for your use. See the box on this page for a ready reference guide. And, be sure to consider the advantages of the new PRESTO White Label disc!



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As Presto's finest disc, the Green Label offers consistently high quality. Virtually no surface noise even after repeated playbacks. Both sides warranted flawless.



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One of the nation's largest carillons is now a popular feature of the new library building at Oklahoma A & M College. Combining the 25-note "Coronation" and the 61-note "Arlington" "Carillonic Bells" instruments, the installation provides the tonal equivalent of 354,834 pounds of cast bells.

Oklahoma A & M joins the growing host of educational institutions proving how "Carillonic Bells" promote the cultural activities of campus and community. With tones as pure and brilliant as those of finest cast bells, and wide undistorted volume, "Caril-lonic Bells" give thrilling pleasure to everyone. Let us give you the full details, write to:

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Business Manager—Attorney—Graduate of Princeton and Harvard Law School, 25 years out, seeks responsible position with school, college, university; member of Missouri, Illinois, New York and U.S. Supreme Court bars; has done graduate work in economics and business administration and has served business and industry in administrative as well as legal capacity; with children in college desires academic life; has teaching experience, Naval training in engineering, and full knowledge of accounting, budgeting, purchasing, and investments; former corporation director, former corporate secretary of a private school; Episcopalian vestryman. Write Box CW 174 COLLEGE AND UNIVERSITY BUSINESS for detailed statement of experience.

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College Union Director—Music; five years experience as student assistant and as director of college union and dormitories; experienced in

opening and organizing new projects; experienced in university and small college operation. Write Box CW 179, COLLEGE AND UNIVERSITY BUSINESS.

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The rates for classified advertisements are: 20 cents a word; minimum charge, \$4. (No charge for "key" number.)

Forms close 25th of month preceding date of issue.

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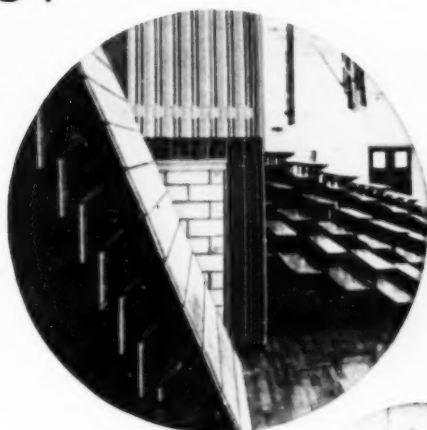
919 N. Michigan Avenue, Chicago 11, Ill.

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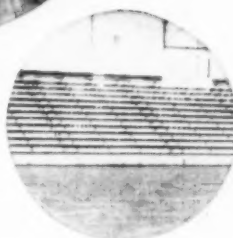


3 gyms in one make **sense**

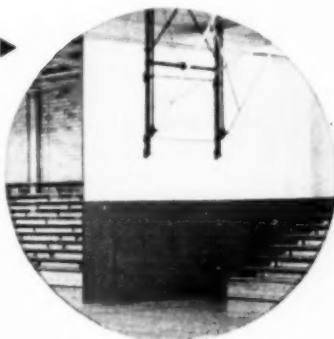
HORN Seats—folded mean plenty of room for practice. A smooth, safe surface protects players.



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HORN Partitions—electrically operated, easily folded back for exhibitions, or extended to provide two or more practice gyms.



FOR SAFETY, plan with HORN! Horn folding gym seats provide a smooth, sloping surface when folded... real protection for the vital zone!

They'll pay for themselves in use! Horn planning and equipment give you maximum gym use—for exhibitions that pay—for efficient practice.

Your local Horn representative helps you plan. Horn factory crews supervise installation. Horn quality construction gives years of trouble-free service.

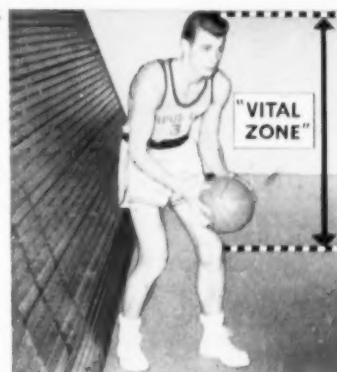
Write today for details on Horn folding gym seats and partitions—and the new folding stages.

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Perfect for Many
Purposes

Whether in lobby, hall, office, reception or guest room, this beautifully designed table is useful and attractive. Three-way stretchers reinforce its sturdy legs, providing great rigidity. Has genuine Woodgrain Formica Top. Equipped with rubber cushion glides.

Natural Birch or Maple finish (Other finishes available).
Woodgrain Formica Top, 34" x 14".
Height — 29".
Weight — 20 lbs.
Bulletin 1004 gives complete details. Write for it.

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Remove unsightly algae and lime deposits, rust and other stains quickly and easily with Bull Frog Saf-T-Klenz! It also minimizes conditions that breed and spread infectious germs.

No longer is there any need to spend hours cleaning a swimming pool and shower rooms. Simply sprinkle a little Saf-T-Klenz powder on the damp surface, mop lightly then rinse with clear water—there's no more hard rubbing, even the most formidable stains quickly disappear. It's odorless and harmless to hands, clothing, floors and drains.

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Designed for easy one-man operation, Fairhurst Unitfold Walls quickly divide rooms to any desired sizes. Separate units join securely to form a rigid, sound resistant wall. Units fold in stacked position or may be concealed in a shallow pocket. Blackboards or other specialized finishes are available. Write for details.



Fairhurst installation at Wellesley College, Wellesley, Mass. Architect: Coolidge, Shepley, Bulfinch & Abbott. Lower view: Units partly open.

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Words of truth and hope from the American Cancer Society save many lives each year from cancer... could save thousands more.

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A Fitting Memorial Now and for Years to Come



Benjamin M. Frankel Memorial Building, Champaign, Illinois

Architects: Harrison and Abramowitz, New York
General Contractors: Kuehne-Simmons Co., Champaign, Ill.
Plumbing Contractor: Reliable Plumbing & Heating Co., Champaign, Ill.

Generations of students on the University of Illinois campus at Champaign, Illinois, will enjoy the facilities offered by this new Hillel Foundation building which was designed and equipped with the future as well as the present in mind.

An example of this type of sound planning is reflected in the choice of Crane plumbing fixtures for the handsome one-story social hall. Plumbing fixtures were chosen for durability, ease of servicing, ease of maintenance and Crane quality—features that mean an investment in lasting service.

Crane fixtures you specify today, either for new buildings or for building renovations, will return dividends in low-cost performance for years to come. Let your architect and plumbing contractor know your preference for Crane.



Partial view of one washroom in Frankel Memorial Building. Crane lavatories are wall-type Norwich model 1-150-S of gleaming, easy-to-clean vitreous china, with Crane's "Embassy" Dial-ese controls and indirect-lift waste fitting.

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VALVES • FITTINGS • PIPE
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DESK TOPS



WORK SURFACES



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Use G-E Textolite* Plastics Surfacing on desks and all work surfaces

**Cut Down on Costly Repairs
Now . . . Insure More Years of
Maintenance-Free Service**

- Immune to inks, paints, fruit juices, crayons, clay.
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- Glare-free — germ proof — scuff and mar-proof.
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- Available in a wide range of beautiful patterns and colors, including wood grains.

Restore desk tops and other work surfaces with rugged G-E Textolite. Reclaim many years of economical use from college furniture by resurfacing damaged tops with this scuff and mar-proof material.

G-E Textolite plastics surfacing is made by the General Electric Company and distributed nationally by Roddiscraft warehouses. It is produced in a wide variety of colors, patterns and wood grains to suit a range of needs in class rooms, laboratories, cafeterias. G-E Textolite on all work surfaces will insure years of maintenance-free service in new installations, add years of useful life to old ones.

Investigate — call in a Roddiscraft representative from any of the warehouses listed below, or write for complete information.

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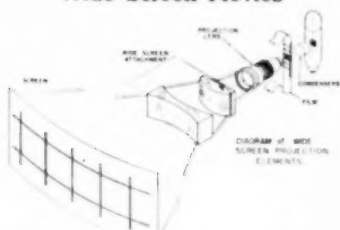
WHAT'S NEW

October 1953

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 96. Circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Wide Screen Movies



A wide screen system with stereophonic sound for 16 mm. movies has been developed by Bell & Howell. Patterned after 20th Century-Fox's Cinema-Scope, the system has a single anamorphic or "squeeze" lens which is used for both shooting and projecting the movies. The projected picture is of normal brilliance and fills a curved screen two and one-half times as wide as it is high. This expanse approximates the normal field of vision of the human eye. A strong sense of depth and participation in the scene is created without the use of special glasses. The illusion is heightened by three-dimensional or stereophonic sound, which emanates from the part of the screen where action takes place.

A modified version of the Filmosound 202 magnetic recording projector developed by the company is used to record the magnetic sound tracks as well as to project the film. Two different sound tracks are recorded side by side on a single stripe of magnetic material permanently bonded to the film edge. The sound is then played back through two separate amplifier-speaker systems located at opposite ends of the screen. Existing motion picture equipment can be adapted for use in the new system which effects realistic sound motion pictures with 16 mm. films. **Bell & Howell Company, Dept. CUB, 7100 McCormick Rd., Chicago 45. (Key No. 531)**

Light Gauge Steel Panel

A new building panel product has been introduced as the Fenestra Double Hat "D" Panel. It is designed for use in floors, ceilings and roofs to span greater distances between structural beams than the single-hat panel. In some cases the new panel can be manufactured in lengths up to 33 feet, eliminating the use of structural beams. In the construction of ceilings or floors for

single-storied buildings the new panels would span across from bearing wall to bearing wall.

Designed in accordance with the specifications of the American Iron and Steel Institute, the new light-gauge steel double hat panels interlock quickly and easily to form subfloor or a combination ceiling and roof. They are spot welded to supporting structural beams or bearing walls. The panels will be produced in gauges 18 through 13, 24 inches wide, with depths from 1½ to 7½ inches. Combining structural characteristics with a finished interior, exterior or both, when assembled, the panels may be electrified as a floor or acoustically treated as walls or ceilings. **Detroit Steel Products Co., Dept. CUB, 2250 E. Grand Blvd., Detroit 11, Mich. (Key No. 532)**

Anniversary Chair



To commemorate the one hundredth anniversary of the establishment of the company in this country, Thonet Industries has brought out a new chair known as the 100th Anniversary Chair. It is modern in concept with departures from current designs. The V-shaped laminated base is reinforced by stretchers and the molded seat and back are shaped for comfort and attractive appearance. An unusual arm arrangement of narrow, curved laminated strips adds to the grace and comfort.

A new bonding process joins back panel and back support of the all wood back, eliminating the need for screws. The new bonding process has been tested and proved to have superior power of adhesion. The new chair is available with arms or armless, with wood seats and wood backs or upholstered. It is available in natural maple, walnut, mahogany or black enamel finish. **Thonet Industries Inc., Dept. CUB, 1 Park Ave., New York 17. (Key No. 533)**

(Continued on page 78)

Klenzade Aluminum Cleaner

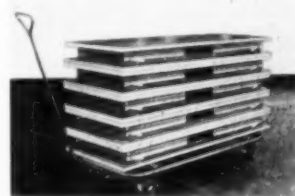
A new detergent has been developed especially for the thorough cleaning of aluminum utensils and equipment without pitting. Klenzade Aluminum Cleaner, Formula HC 70, is a balanced detergent designed for commercial equipment cleaning by hand or soaking methods. It is of the moderate alkaline type containing both special corrosion inhibitors and active wetting agents for effective soil penetration and clear, bright rinsing. **Klenzade Products, Inc., Dept. CUB, Beloit, Wis. (Key No. 534)**

Thomas Tandem Collator

The new Thomas Tandem Collator operates on a unique tandem principle which permits collating of 32 pages in two groups of 16 pages, four groups of eight pages, etc. It is divided into two sections of 16 bins each and the use of adjustable trays allows page sizes to vary from 3 by 8½ to 14 by 17 inches. The 32-page collator collates, assembles or gathers reproduced lists, bulletins, directives and other material at speeds as high as 12,000 sheets per hour. It measures 46 inches across and is 22 inches deep, of all steel construction. **Thomas Collators, Inc., Dept. CUB, 30 Church St., New York 7. (Key No. 535)**

Folding Table Truck

A new truck has been introduced which is designed to hold twelve or more Hostess Folding Tables for transportation or storage. Tables are stacked top to top on the truck to protect their top surfaces in storage. The BTC Table Truck has a sturdy steel tubing frame, a detachable handle for towing and four smooth rolling casters for easy handling.



It is 68 inches long and 32 inches wide with gunmetal finish. **The Brewer-Titchener Corp., Dept. CUB, Cortland, N. Y. (Key No. 536)**

What's New ...

Lift-Lid Desk



A desk surface of 20 by 24 inches, providing maximum working area, is a feature of the new Brunswick individual, lift-lid desk. The large, flat-level top helps the pupil adjust to conditions found in the home and the business world. The design of the desk permits several to be grouped together for a large surface working area.

The large book box provides ample storage space and is equipped with a built-in pencil tray and convenient clean-out holes. Neatness and orderliness are encouraged by the flat bottom. Brunswick uni-structure design provides complete support for the desk without use of the book box as a bracing factor. Comfort and quietness are provided through the resilient structure and the

rubber mounted floor glides. The desk top is available in $\frac{3}{8}$ inch durable plywood with plastic facing or in $\frac{1}{4}$ inch solid wood. The individual lift-lid desk is available in heights of 21, 23, 25, 27 and 29 inches. Brunswick-Balke-Collender Co., Dept. CUB, 623 S. Wabash Ave., Chicago 5. (Key No. 537)

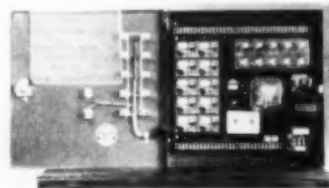
Bondex Cement Paint

A new formula is employed in the manufacture of Bondex Cement Paint for dampness control problems and Bondex Heavy Duty for serious moisture control. They offer a simple method of attractively resurfacing porous masonry surfaces while combating all degrees of moisture control problems. The Heavy Duty is an aggregate type wall coating for rejuvenating old buildings having porous masonry surfaces. It is applied with an ordinary fiber brush on interior and exterior masonry walls and penetrates the pores of the material hydraulically. When dry it gives an even sand-like finish, hiding cracks, mortar joints, rough spots, form marks and other uneven characteristics of the surface. It can also be used by builders in treating exterior walls, which will be below grade. The Reardon Company, Dept. CUB, 7501 Page Blvd., St. Louis, Mo. (Key No. 538)

Fire Detection Control Panel

A new fire detection control panel is being introduced. The panel is composed of two series of super-sensitive relays, wired in balance to give a completely supervised, closed circuit Fire Alarm System. It operates from standard A.C. outlets. In case of power failure a selector relay automatically puts the system onto standby batteries. In case of circuit breakage anywhere throughout the installation indication is given both audibly and visually.

The Control Panel has Underwriters Laboratories approval, according to the manufacturer. It is sturdily constructed for trouble-free operation and is designed to be foolproof. Alarm systems are maintained automatically by the control unit until reset. Indicator lights on the panel



give visual location of the fire or trouble area. Notifier Manufacturing Co., Dept. CUB, 239 S. 11th St., Lincoln 8, Neb. (Key No. 539)

(Continued on page 82)

NO MORE RAKING LEAVES



Here's the key to neat, leaf-free grounds — remove fallen leaves quickly, easily, and economically with the

TURBO-JET Power Leaf Mill! Based on an entirely new principle, the TURBO-JET employs a high velocity stream of air to suck up leaves, grate them into a fine powdery chaff, and blow the chaff back into the lawn to act as a mulch. Easy to operate, light and simple in construction, the TURBO-JET efficiently cleans leaves from lawns, out of ivy beds and shrubbery, from around fences and copings and other "hard-to-reach" places. Sturdy TURBO-JET moves a lot of leaves in a short time — permits one man to do the work of ten men with rakes!

Write today for folder and name of nearest dealer.

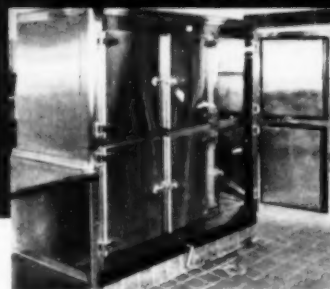
THE TURBO JET MFG. CO.
26 BOWMAN TERRACE
CINCINNATI 29, OHIO



HERRICK STAINLESS STEEL REFRIGERATORS

Performance-Proved

at the
UNIVERSITY
of
OKLAHOMA



Herrick units were supplied by Goodner Van Engineering Company, Tulsa, Oklahoma.

The HERRICK Model RSS66 Double-Front Pass Through above is one of seven HERRICK Stainless Steel Refrigerators serving Oklahoma University's new Memorial Union Building at Norman. These capable HERRICK units assure the ultimate in fresh, flavorful foods. For trouble-free, low-cost-per-year service, HERRICK is tops. You'll like HERRICK. Write today for name of nearest HERRICK supplier.

HERRICK REFRIGERATOR CO. • WATERLOO, IOWA
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HERRICK *The Aristocrat of Refrigerators*



The Kodoscope Pageant Sound Projector, Model AV-151, is normally supplied with a 2-inch f/1.6 lens and 750-watt lamp. For extremely long projection throws, as in the actual auditorium scene illustrated above, the projector can be equipped with a 3- or 4-inch lens and a 1000-watt lamp. Projector, complete with 12-inch speaker and standard lens and lamp, \$530.

With the powerful new Pageant Model AV-151, you can "tailor" sound to fit the auditorium!

Auditoriums often present acoustical problems which the average 16mm. sound projector fails to overcome. Often good films are ineffectively presented because sound is "scrambled." Consequently, attention wanders. The message fails to get across. Time is wasted.

In recognition of this trouble, Kodak designed a new portable 16mm. projector for auditorium use—the Kodoscope Pageant, Model AV-151—one of a series designed to meet every 16mm. requirement. This model features a 15-watt, high-fidelity amplifier with 12-inch Kodak De Luxe Speaker for extra output and speaker capacity. Separate bass, treble, and Fidelity controls enable you to tailor sound to overcome "boominess," adjust for worn sound tracks or

different emulsion positions so that you get the best results obtainable from every film.

Like all portable Kodak 16mm. Projectors, this model is permanently pre-lubricated—an exclusive feature with Kodak 16mm. sound equipment which eliminates the chief cause of breakdowns.*

Ask your Kodak Audio-Visual Dealer to demonstrate the full Kodak line. For extra screen brilliance, there are two Pageant models equipped with the remarkable Plus-40 Shutter—giving more than 40% extra light. For sports analysis, the new Analyst Projector is designed for heavy-duty reversing. And for "average" sound projection, the moderately priced Pageant, Model 1, is tops. Call your dealer today—or write Kodak for further information.

*Here's what A-V experts say about Pageant pre-lubrication



"Proper lubrication is essential to any moving mechanical part. The Pageant Projector's pre-lubrication is insurance against excessive wear and equipment failures, caused by lack of lubrication."

Wayne K. Newman, Mgr.
Deseret Book Company
Salt Lake City, Utah



"Breakdowns help our repair business, but we'd rather keep our customers happy and satisfied with their purchases. That's why we go all out on the Pageant with its permanent lubrication."

Elmer J. Peters
J. E. Foss Company
Pittsburgh, Pa.



"Permanent lubrication is the most important development we've seen in years to assure projector dependability. Lubrication worries are over for schools and churches that use the Pageant."

Ben A. Rentz, Jr.
Baptist Book Store
Fort Worth, Texas



"You'd be surprised how many school projectors come in for repairs due to lack of lubrication. Pageant pre-lubrication saves schools on repair bills and avoids loss of use during a busy season."

J. Fred Kyle
Kyle & Company
Clarksburg, W. Va.

MOTION PICTURES . . . teach, train, entertain

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*Two hundred and eighty-nine
schools and colleges now offer
their students the*

TUITION REFUND PLAN

It is twenty-three years since we originated the Tuition Refund Plan. Each year since then has seen a steady increase in the number of users and few who have enjoyed the benefits of the Plan are ever again without its protection.

The Tuition Refund Plan reimburses students for lost class time. It is not a tuition funding plan or a sickness and accident plan. It protects the student's investment in education and secures the tuition income of the college that offers it. It makes possible a sound equitable refund policy. Participation is optional and it costs the college nothing.

The original Tuition Refund Plan applies only to losses due to medical causes. Recently a new Broad Form of the Plan has been made available and has been approved in many states. This Broad Form extends the Plan to include losses due to non-medical causes including voluntary and involuntary withdrawals.

You should know all about these popular Plans and how they would benefit your college and its students. Write to us telling us your terms of enrollment, number of students and fees as well as which plan you prefer.

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New York University Law School, New York City. Architects: Eggers and Higgins.

NEW AMERICAN UNIVERSAL PEDESTAL TABLES

improve lecture-demonstration teaching

Check these advantages—assured by American Universal Pedestal Tables with No. 106 Pedestal Chairs, but not afforded by other furniture:

1. All Students can see instructor and demonstrations.
2. Swivel chairs provide greater freedom to perform, easier ingress and egress.
3. Ample passageway is maintained between chair backs and tables.
4. Easy to clean, easy to clean around.
5. More efficient use of space, because each installation is tailored to the room.

Continuous working surfaces, in straight rows, or on a radius, can be provided only with American Universal Pedestal Tables. Equally effective in large or small rooms, on level or sloping floors, with or without risers. The offset steel pedestals leave ample leg room.

Table tops are urea-resin bonded, heavy, cored plywood; available with book-storage compartments. The comfortable cradleform swivel seats have deep-curved backs and are adjustable in height; backs and seats are bonded plywood, and, like table tops, are durably lacquered in natural-birch finish.

Let our expert seating engineers help design an installation to fit your individual needs. Just write us for complete information—no obligation.

American Bodiform Auditorium Chairs

Full-upholstered—most beautiful and practical auditorium chairs. The ultimate in comfort, durability, acoustical benefit. Available with or without folding tablet arm.

American Seating Company

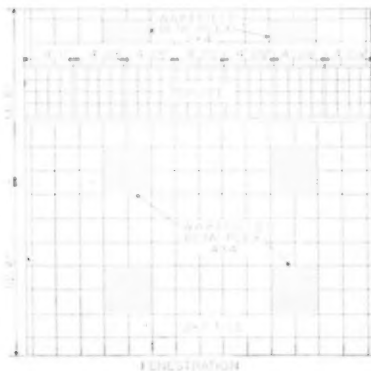
WORLD'S LEADER IN PUBLIC SEATING

Grand Rapids 2, Mich. Branch Offices and Distributors in Principal Cities
Manufacturers of School, Auditorium, Theatre, Church, Transportation, Stadium Seating, and Folding Chairs

How to supplement glass block skylighting by using Wakefield Beta-Plex units



For daytime only: four 2' x 4' Beta-Plex recessed units are mounted on the ceiling almost in the center of the room. The arrangement of side wall and glass block skylighting shown here will put the low point of day-light directly under the Beta-Plex units.

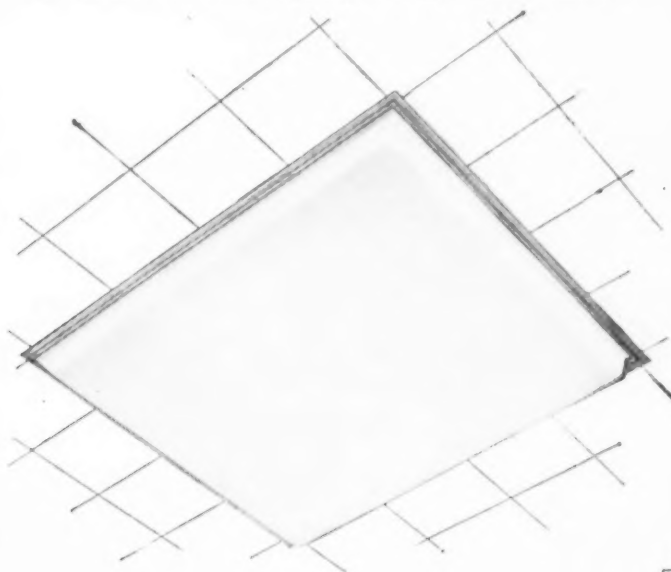


For Day and Night Use: a minimum of 30 ft.-C of electric light to meet the requirements of American Standard Practice will be provided by this arrangement of two 2' x 4' and four 4' x 4' Beta-Plex units. Separate circuits and switches will permit full (night) or partial (day) use.

Wakefield Beta-Plex is a complete unit ready for recess mounting in a suspended ceiling. Separate circuits and switches may be installed for different lighting levels. The ballasts and lamp-holders are contained in an individual metal housing that provides for hook-on suspension points for the Wakefield Rigid-Arch Diffuser.

The Rigid-Arch Diffuser is molded with a sweeping arch, slightly higher in the center than at the edges to give greatly improved rigidity. It has a non-specular, matt finish that minimizes possible reflected glare from outside the building. Beta-Plex is also available with louvers. The Touch-Latch makes the interior of the luminaire readily available; press up with the touch rod—the Touch-Latch releases and the Rigid-Arch Diffuser swings down and open. Press the diffuser up again—the Touch-Latch secures the panel in place. Available in 2' x 2', 2' x 4', 4' x 4' and 4' x 4' units.

For an illustrated, descriptive 8-page folder on Beta-Plex, write to The F. W. Wakefield Brass Company, Vermilion, Ohio. In Canada: Wakefield Lighting Limited, London, Ontario.

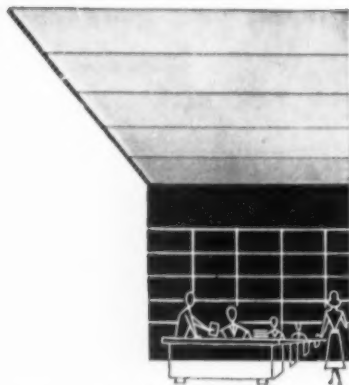


Beta-Plex is one of a series of Wakefield Geometrics. Others are Omega-Plex, Theta-Plex and Sigma-Plex. Folders describing each are available.

WAKEFIELD GEOMETRICS
Integrated modular components for functional ceilings

What's New . . .

GrateLite Ceilings



Diffusing GrateLite Ceilings have been developed to provide glare free lighting. Designed for use in forming a completely illuminated ceiling, GrateLite is a plastic louver diffuser. Light is diffused through the $\frac{1}{8}$ inch translucent cubical facets which provide 45 degree lamp shielding. Low brightness diffused illumination, evenly distributed from wall to wall, results.

The open, lattice like GrateLite pattern adds functional beauty and creates an atmosphere of cleanliness and efficiency. The ceilings are easily installed. Maintenance is kept at a minimum because of the open construction and when

cleaning is required, panels are removed, washed and de-staticised in two minutes. The Edwin F. Guth Co., Dept. CUB, 2615 Washington Ave., St. Louis 3, Mo. (Key No. 540)

Roach Spray

A new type insecticide has been introduced for the control of cockroaches. When sprayed on surfaces known to be traveled by roaches, Pressurized Roach Spray deposits an invisible film of active ingredients having both contact and residual killing powers. The killing ingredients are forced into cracks and crevices from the pressurized container. The new spray contains Chlordane, DDT and other special chemicals, offering maximum roach control with minimum effort. It is quick and easy to use, will not stain woodwork, fabrics or painted surfaces, and is nontoxic to humans. J. I. Holcomb Mfg. Co., Dept. CUB, 1601 Barth Ave., Indianapolis 7, Ind. (Key No. 541)

Stor-Mor Book Drawers

Designed to increase the book storage capacity of libraries, the Ames Stor-Mor Book Drawers utilize every other range aisle in the stack area. This new compact

storage equipment can accommodate up to twice as many volumes as conventional shelving. Existing installations of free-standing or multi-tier shelving are readily converted to compact storage. The same uprights used for bracket-type or case-type shelves serve as supports for the Stor-Mor Drawers. Drawer assemblies can be added for one or more sections of a range, or for complete conversion.

All volumes are placed in parallel rows the full depth of the drawer, and are held in position by an adjustable book support. For quick identification, each drawer front is equipped with two 3 by 5 inch card holders. The drawers open and close easily and quietly on ball-bearing rollers. They are adjustable to any



desired height on the supporting columns. W. R. Ames Co., Dept. CUB, 150 Hooper St., San Francisco 7, Calif. (Key No. 542)

(Continued on page 86)

DURABLE
AND
Smart
FURNITURE



Side Chair

No. 358

For dormitory, library and other college uses. See your dealer for information and prices.

AMERICAN
CHAIR COMPANY
MANUFACTURERS
SHEBOYGAN, WISCONSIN

100

DIFFERENT SIZES, STYLES OF BULLETIN BOARDS AND CHANGEABLE LETTER BOARDS

BY DAV-SON

A Dav-Son board for every job. Changeable letter directory and announcement boards, black boards, menu boards, others. Sturdily constructed, every Dav-Son board is built to last, with quality built-in for years of service.

Dav-Son Changeable Letter Directories for Lobby, Office, Outdoor Use.

- Wide Variety of Styles and Sizes
- Glass Enclosed Front
- Hardwood or Metal Frames
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- Absolutely Warp-proof
- Also Available with 5" 3" Standards

Dav-Son Genuine Self-Sealing Cork Bulletin Boards

- Indoor and Outdoor Styles
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- With or Without Locking Glass Doors
- World's Largest Selection

DEALER INQUIRIES INVITED
If Your Dealer Can't Supply, Order Direct

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A. C. DAVENPORT & SON, INC.

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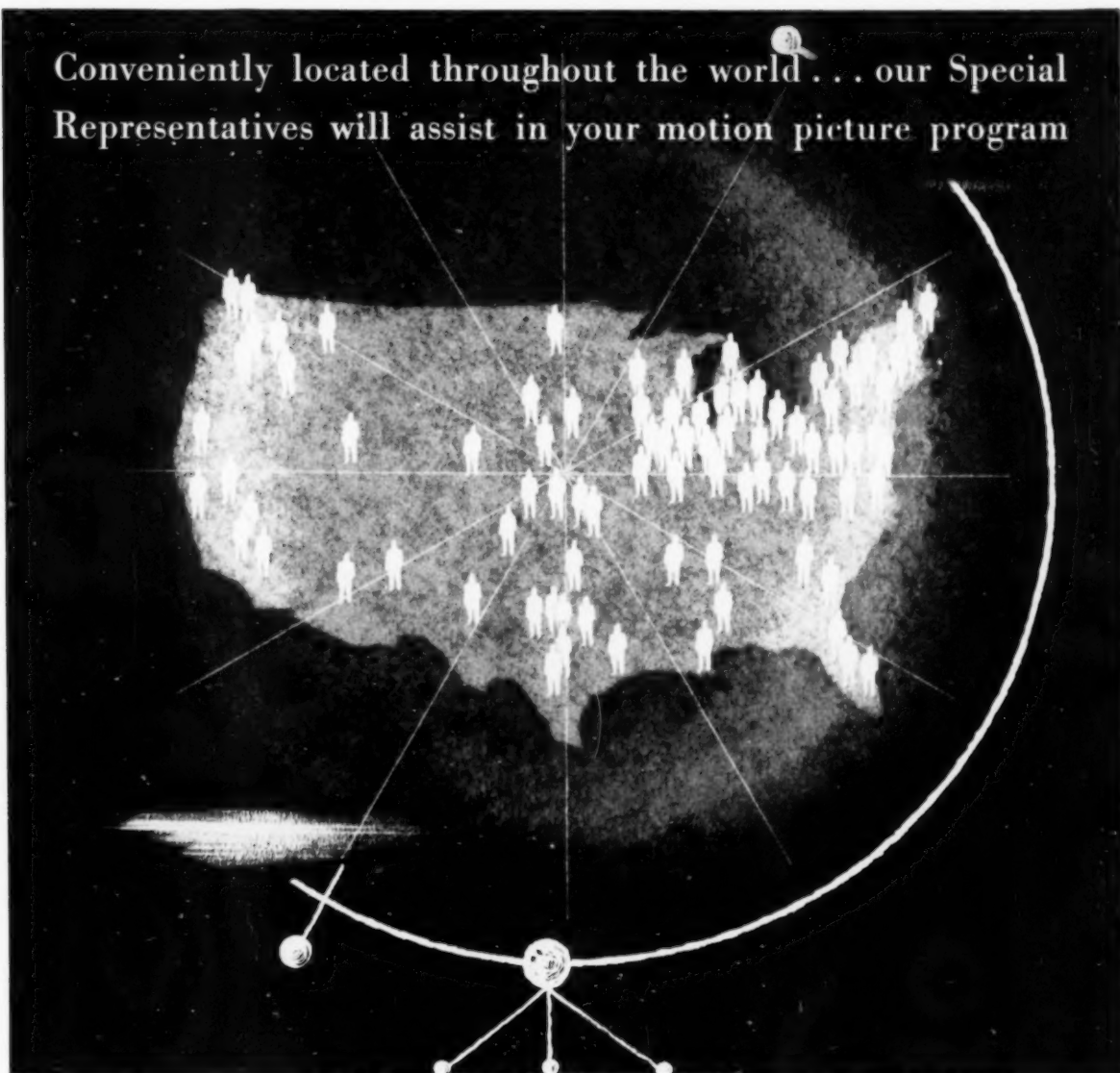
INSIST ON DAV-SON—YOUR BEST BUY!



Dav-Son Changeable Name Plate
Black card with white letters under beveled plexiglass shield. Triangular wood base in choice of Walnut, Oak, Mahogany, Blonde or Steel Grey finish. 10 1/2" x 2 1/2"

BELL & HOWELL AUDIO-VISUAL SPECIALISTS-AT YOUR SERVICE!

Conveniently located throughout the world... our Special Representatives will assist in your motion picture program



Bell & Howell offers you a specialized service! Each Bell & Howell Special Representative maintains the finest facilities to assist you in your motion picture program. Without any obligation to you, you can benefit from his experience and factory training. This unusually qualified expert can show you the best equipment to suit your own motion picture activities. And *only* a Bell & Howell Special Representative is authorized to sell the new heavy-duty Filmosound Specialist projectors that give 400% longer life. Call your Special Representative soon... or send in the coupon.

Bell & Howell *makers of the world's finest motion picture equipment*

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7192 McCormick Road
Chicago 15, Illinois

Please send me, without cost or obligation, the name of my Bell & Howell Special Representative and complete information on the Filmosound Specialists.

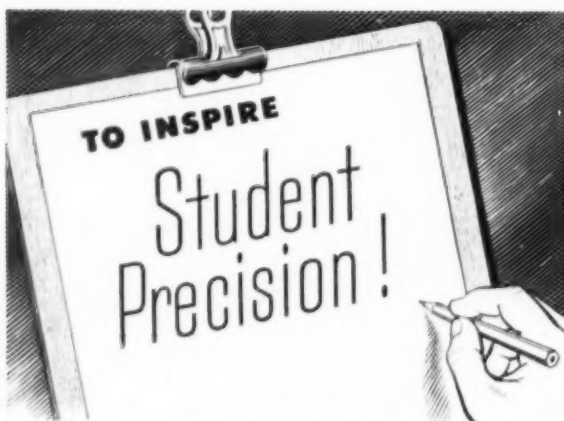
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ORGANIZATION.....

ADDRESS.....

CITY.....

COUNTY.....STATE.....



Preferred by instructors because they inspire students to new achievements . . . WESTON instruments also are the choice of practical administrators because their ruggedness and year after year dependability make their cost remarkably low! Ask for bulletin listing all instruments.

WESTON Electrical Instrument Corporation,
614 Frelinghuysen Avenue, Newark

For Advanced Requirements MODEL 622



Ultra sensitive instruments of the double pivoted type requiring no leveling when used in horizontal position. Combine high accuracy and a 6.1 inch scale . . . ideal for precise measurements of potential and current at very low energy levels. Available as d-c voltmeters, millivoltmeters, milliammeters and microammeters; electrolysis volt-millivoltmeters and high resistance voltmeters—also as a-c rectifier type instruments and as thermocouple ammeters, milliammeters and voltmeters.

For Electrical Machinery Labs MODEL 633

A clamp-on volt-ammeter built to Weston standards of safety, accuracy and dependability. Five full scale a-c current ranges of 1000/250/100/25/10 amperes with range overlap. Three self-contained a-c voltage ranges of 700/350/175 volts—insulated for 750 volts. Has convenient 6 position switch easily operated by thumb—adjustable pointer stop facilitates measuring starting current of motors.



WESTON



Instruments

more efficient vacuum cleaning for institutions



While most people realize that vacuum cleaning is about the only practical way to clean rugs and carpets, a surprising number do not know that adequate vacuum and modern tools have made vacuum cleaning equally practical for bare floor cleaning.

When we speak of bare floors, of course, we mean all uncovered flooring from cement to highly polished waxed floors or linoleum. The answer to the different surface textures lies in the different tools that are designed for each. Because of these tools, your Spencer portable will get more dirt in less time and with less effort from your bare floors than any other method you can use.

Bare floor vacuum cleaning does a much more thorough job than any other method such as dry mopping, sweeping, damp mopping, etc. Vacuum mopping, sweeping, damp mopping, etc. Vacuum mopping takes the dirt off the floor instead of pushing it from one place to another. It also gets dirt from corners and baseboards, which is not easily done with sweeping or dry mopping.

Vacuum cleaning bare floors every night keeps the floor clean and makes the operator's job easier.

ABOVE

A PAGE OF OUR 32-PAGE BOOK

"A GUIDE TO EASIER CLEANING"

Complete book on request ▼

THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT



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Please send my copy of A GUIDE TO EASIER CLEANING

Name _____

Street & No. _____

City & State _____

48P53

COLLEGE and UNIVERSITY BUSINESS

in 1853

When Franklin Pierce was President of the United States, Thonet established offices in New York to introduce Bentwood chairs in America.

From the first Bentwood chair which was invented by Michael Thonet in 1830, to today's laminated bentply designs, Thonet's name has become synonymous with good chairmaking.

The first Bentwood chair, made of laminated veneers, was the forerunner of today's laminated bentply.



A HUNDRED YEARS OF PROGRESS

in 1953

Millions of Thonet chairs throughout the United States give comfort, service and satisfaction to their users. Time-honored by its long history of success, Thonet looks forward to another century of outstanding progress.



Today's laminated bentply chair 1302.



Choose from Thonet's large selection of furniture designs. Write for brochure illustrating the furniture you need. Dept., H 10
1 Park Avenue
New York 16, N. Y.

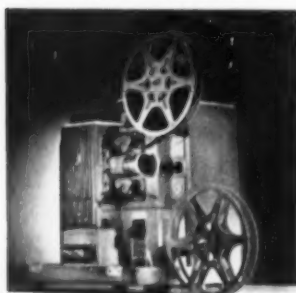


Visit our beautifully redecorated New York Show Room at
ONE PARK AVENUE

Other Show Rooms:
Chicago
Statesville, N. C.
Dallas

What's New ...

Kodascope Royal Projector



A new approach to 16 mm. silent projector design is offered in the new Kodascope Royal Projector. The positive-drive nylon geared reel arms fold for greater compactness, the projector is smartly styled and precision engineered and has permanent pre-lubrication. The 750 watt lamp assures brilliant film projection on the screen. The motor switch, lamp switch rheostat, threadlight, receptacle, framing knob, reversing switch and elevation control are all located on the operator's side for ease of operation. The motor and lamp are electrically interlocked so that the lamp cannot be turned on unless the motor and blower are also operating.

The machine is quiet in operation and offers either forward or reverse projection. It is housed in its own carrying

case, the cover of which provides ample storage space for an extra reel, lamp and other supplies. Eastman Kodak Co., Dept. CUB, Rochester 4, N. Y. (Key No. 543)

Refrigerated Dessert Display

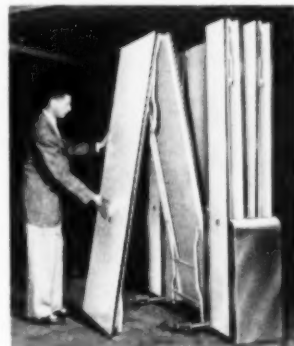
Cafeterias, lunchrooms and soda fountains in institutions can be equipped with a refrigerated dessert display cabinet. The new Frigidessert unit provides 11 square feet of refrigerated display. It is a self-contained unit with the compressor built into the stainless steel showcase. It operates by being plugged into any standard electric outlet. Stainless Food Equipment Co., Dept. CUB, 272 New St., Newark 3, N. J. (Key No. 544)

Mobil-Fold Table and Bench

Two 14 foot tables with four 14 foot benches, providing seating for forty children, are combined in the Mobil-Fold Table and Bench unit. The assembly, when not in use, can be rolled against the wall, out in the corridor, or to a storage room, and is quickly brought into an auditorium, gymnasium or other area and easily opened for use. When unfolded, the tables and benches may be left attached to the carrier which facilitates

quick folding to get them out of the way when no longer needed. By turning a key the tables and benches may be unlocked from the track in the carrier and rolled to any position desired for lunchroom, meetings, exhibits and other purposes. The benches are not attached to the tables and may be used separately.

Tables and benches are of the same sturdy construction as Schieber's Port-A-Fold unit. Understructures are of strong, tubular steel and tops are 1/4 inch Philippine mahogany plywood with sani-



tary plastic surfaces and backer sheets. Schieber Sales Co., Dept. CUB, Brightmoor Station, Detroit 23, Mich. (Key No. 545)

(Continued on page 90)

...at the head of **CLASS**

HORNER

ALL
WOOL

ANTI-SHRINK
DORMITORY BLANKETS

with your
SCHOOL EMBLEM

Your school will be justly proud of your own special dormitory blankets by Horner . . . emblazoned with the school's initials or emblem . . . and treated by Horner's exclusive anti-shrink process which reduces blanket shrinkage 83 per cent.



Passenger Blankets — quality-selected to outfit the U.S. United States, America's finest luxury liner.

IN ANY SIZE OR COLOR

write: **HORNER WOOLEN MILLS COMPANY**
EATON RAPIDS, MICHIGAN

SHINES UP
POTS - PANS

MAKES GLASSES
DISHES SPARKLE

MAGIC ACTION ON
GREASY UTENSILS

KEEPS STAINLESS
STEEL BRILLIANT

IDEAL FOR WINDOWS
PAINTED SURFACES



There's Nothing
Like **KLEER-MOR**
in the Kitchen

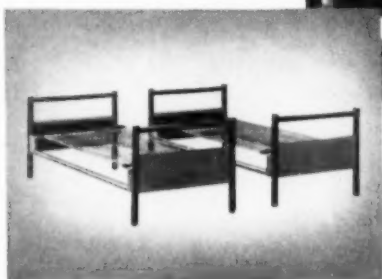


KLEER-MOR
CLEANS EVERYTHING

America's
Most Versatile
Cleaner

KLENZADE PRODUCTS, INC.
BELOIT, WISCONSIN

*to meet shifting
dormitory requirements...*



Simmons D.B.-930 demountable double-deck beds

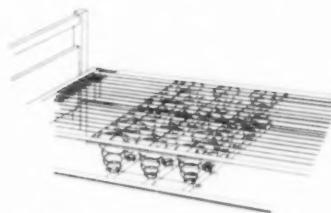
Here's sturdy dual-purpose sleep equipment that serves equally well for double-deck bunks or as handsome twin beds... enables you to meet shifting demands on dormitory accommodations easily, and without extensive outlays for replacement furniture.

Simmons demountable Double-Deck Beds combine dual purpose practicality with the comfort and quality

construction for which Simmons furniture and sleep equipment are famous: Sturdy welded steel frame, durable Simfast finish, strong steel ribbon springs. You get the finest when you order from Simmons complete line of dormitory equipment. See your equipment dealer or write your nearest Simmons display room for details.

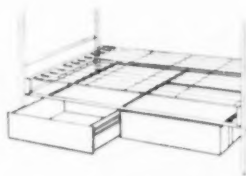
*Dormitory equipment from
Simmons' Complete Line*

Simmons DB-930 Bed with SKC ribbon fabric springs used with Duet Desk F-152-21, the single unit that supplies generous desk area for two students, F-152-5 Chest, BL-10 Ladder and BLR-10 Lee Rails.



Coil Support L-1601

provides firm support, prevents sagging. For added sleeping comfort, less spring wear.



Under-Bed Drawer F-90

clamps firmly to bed rail on both sides. Provides convenient additional drawer space for double rooms.



Contract Division

SIMMONS COMPANY

Display Rooms:

Chicago 54, Merchandise Mart; New York 16, 1 Park Ave.; San Francisco 11, 295 Bay St.; Atlanta 1, 353 Jones Ave. N.W.; Dallas 9, 8600 Harry Hines Blvd.

Vol. 15, No. 4, October 1953

Mr. Superintendent

it's not
just a
wastebasket—
it's a

VUL-COT
TRADE MARK



New Rectangle—5A



New Square Top—2A

When you buy Vul-Cots, you are getting more than a mere receptacle for holding waste paper. You are buying economical waste handling, for years. Every Vul-Cot you purchase carries with it a 5-year guarantee. Cut your maintenance and replacement costs—end your waste handling worries now—just say Vul-Cot.

The two Vul-Cots illustrated are *new* in the line. All Vul-Cots are made of hard vulcanized fibre, they look better and last longer. Colors do not chip off; double rolled tops do not break. They are lightweight, noiseless . . . exclusive bonded seam construction gives added strength. Vul-Cots do not crack, splinter, dent, rust or corrode. Standard colors: maroon-brown and olive-green. Write today for catalog price sheet—Dept. CU-10.

For Sale by Stationers and
School Supply Houses Everywhere

National
VULCANIZED FIBRE CO.
Wilmington • Delaware



Far-Sighted Choice for Sound Planning



TUBULAR STEEL SCHOOL FURNITURE In Carefully Graded Sizes

Write today for illustrated catalogue:
Heywood-Wakefield School Furniture Division
Menominee, Michigan.

DOLCOWAX for BEAUTIFUL FLOORS

DOLCOWAX is a premium-quality floor wax for general use, sold with the guarantee that, regardless of price, *no competing floor emulsion wax will outwear it!* Easily applied, DOLCOWAX leaves a beautiful, lustrous film, hard and durable, which actually *improves* in lustre under foot traffic.

**GROWS BRIGHTER
UNDER TRAFFIC!**

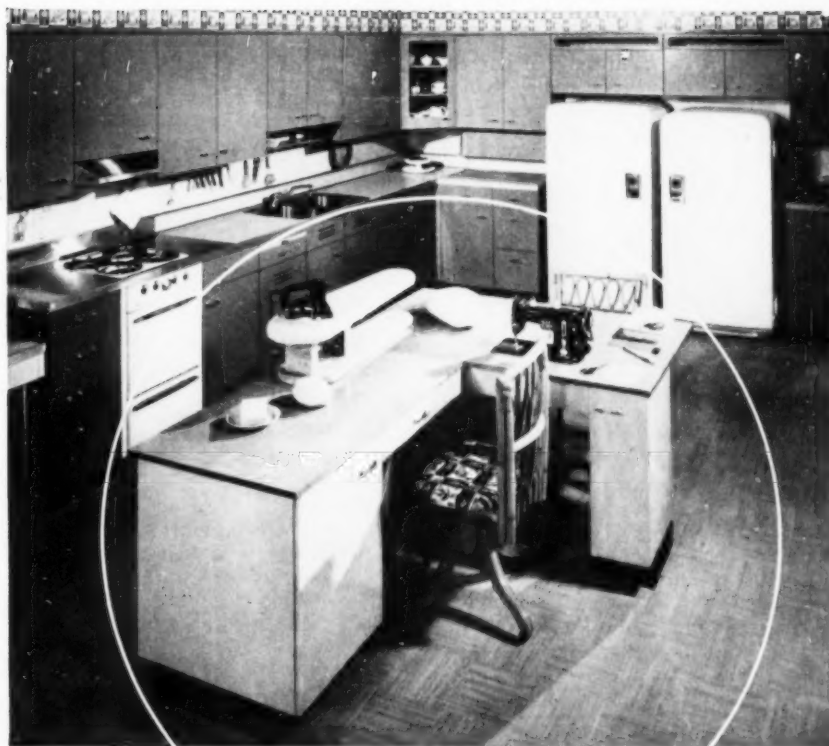
For **FREE**
SANITARY SURVEY
of Your Premises
consult your
DOLGE SERVICE MAN

DOLGE has a floor finish for every specific purpose. If you have a special floor maintenance problem, your Dolge Service Man will gladly demonstrate the *correct* finish. No obligation, of course.

dependable
DOLGE

WESTPORT, CONNECTICUT

St. Charles exhibit at the A.H.E.A. convention.
New clothing construction unit in foreground



ANOTHER *St. Charles* FIRST!



TOTE TRAY UNITS

Other St. Charles equipment for the clothing classroom includes wardrobe units and tote tray units. These may be used separately or, with mirrors on doors, may be grouped to make fitting area as shown below. Grooming area is also available.



New Clothing Construction Unit Organizes Work in the Clothing Classroom

This compact unit adapts, for the clothing classroom, the same basic principles—smooth flow of work and convenient locations of materials and equipment that are found in the St. Charles foods classroom. Focal point is the sewing machine which drops into the counter when not in use. To its right is storage for attachments and a file for reference material. The depression on the surface holds pins and scissors. Drawer at left holds tracing supplies. Tracing board is suspended on slides below drawer. Cupboard at left holds tote trays. There is storage on other side for skirt board and other pressing equipment, including asbestos lined compartment for steam iron and additional tote tray storage. Fold over leaf, which covers machine when not in use, opens out to provide counter space for pupil doing hand sewing. Three-panel jointed Masonite cutting board fits over top providing cutting surface 43" x 66".

Over a year of research has gone into the production of this newest addition to the equipment offered by St. Charles for the homemaking classroom which includes unit kitchens for the foods room and storage units for the laundry. All St. Charles equipment is available in choice of twelve colors, an important aid in making the classroom homelike and appealing.

FREE BOOKLET. Send for your free copy of *Education for Living*, a recently published study of St. Charles products and their application to the homemaking classroom. Write to

ST. CHARLES MANUFACTURING CO., 1617 E. Main Street, St. Charles, Ill.

St. Charles CUSTOM EQUIPMENT
FOR THE HOMEMAKING CLASSROOM
FOR THE HOME KITCHEN

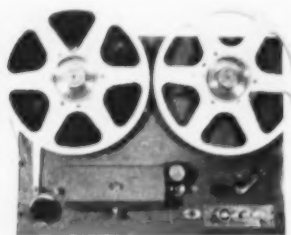
What's New ...

Kohler Cleanser

A cleanser for bathroom and kitchen equipment has been developed by Kohler Company which safeguards enameled surfaces. Known as Kohler Cleanser, the product is the result of careful research. It cleans sinks and other enameled surfaces effectively without damage to the smooth, glass-hard finish. Kohler Cleanser is also effective in cleaning glass, tile, pots, pans and other utensils. Kohler Co., Dept. CUB, Kohler, Wis. (Key No. 546)

Model RC-11 Tape Recorder

The new Presto RC-11 is a tape transport mechanism with separate heads for



recording, playback and tape erasing. The entire unit is self-contained and is instantly removable for maintenance or

replacement. Improvements include complete push button operation, enclosure for recording heads and a heavy, ribbed cast aluminum panel for rigid support of all components. The unit accommodates reels up to 10½ inches in diameter and will record at 7½ or 15 inches per second. The new recorder is available as chassis only for rack mounting, or comes mounted in portable or console cabinet. Presto Recording Corp., Dept. CUB, P. O. Box 500, Paramus, N. J. (Key No. 547)

Dixie Fountain Line

A new line of Dixie cups for soda fountain and snack shop use has been introduced. It includes fountain cups, a super-sundae dish, three types of melamine plastic holders for cups and dishes, and two heavy-duty plastic dispensers. The "super-blend" fountain cup is available in six sizes and has double-thick, machine-formed bottom for greater strength. The new melamine holders are resistant to scratching, chipping, breaking or warping and are colorfast, odorless, burnproof and quiet. The new dispensers are made of molded plastics in buff and gray and are designed to be top-loaded direct from the carton. They protect dishes from dust, dirt and handling and can be easily washed or wiped

(Continued on page 92)

clean. Dixie Cup Co., Dept. CUB, Easton, Pa. (Key No. 548)

Dual-Purpose Hand Truck

A new combination hand truck and step ladder unit has been developed which facilitates moving or storing supplies, maintenance work and other tasks in institutions. Known as the Step-Truck, the unit fulfills all conventional usages of a hand truck and a ladder. It has specially designed curved crossbars and a solid nose plate, making it effective as a hand truck. When used as a ladder, it leans on the nose plate which serves as



a firm base, providing a safe and convenient elevation platform. Fairbanks Company, Dept. CUB, 395 Lafayette St., New York 3. (Key No. 549)




**FASTER SERVICE
without breakage**

Serve quicker and wash dishes quicker with Plastic Ware. You will be free from the usual problem of costly breakage.

EQUALLY IMPORTANT, food looks more tempting when served in this colorful ware. Eye appeal means appetite appeal. This plastic ware is beautiful in design and color. It's lighter to carry. Want to see samples?

Ask for a DON Salesman to call. He carries the complete line of 50,000 items including just about everything in equipment, furnishings and supplies for faster food service. Satisfaction guaranteed or your money back.

EDWARD DON & COMPANY
1400 N. Miami Ave. 2201 S. LaSalle St. 27 N. Second St.
Miami 32 CHICAGO 16 MINNEAPOLIS 1

Monroe TRUCKS

**Handle Folding Banquet Tables & Chairs
The Easy Way With
Monroe Transport-Storage Trucks**



By storing tables and chairs on trucks two men can clear a room six times as rapidly as two men handling the tables and chairs manually.



Chair Truck No. TSC



Handles up to 40 chairs

Your choice of sizes and models—Low Trucks for under-stage storage; Short Trucks for small elevators; Trucks custom-built to meet your needs. Monroe Trucks are shipped fully assembled except for slip-in socket handles which are enclosed.

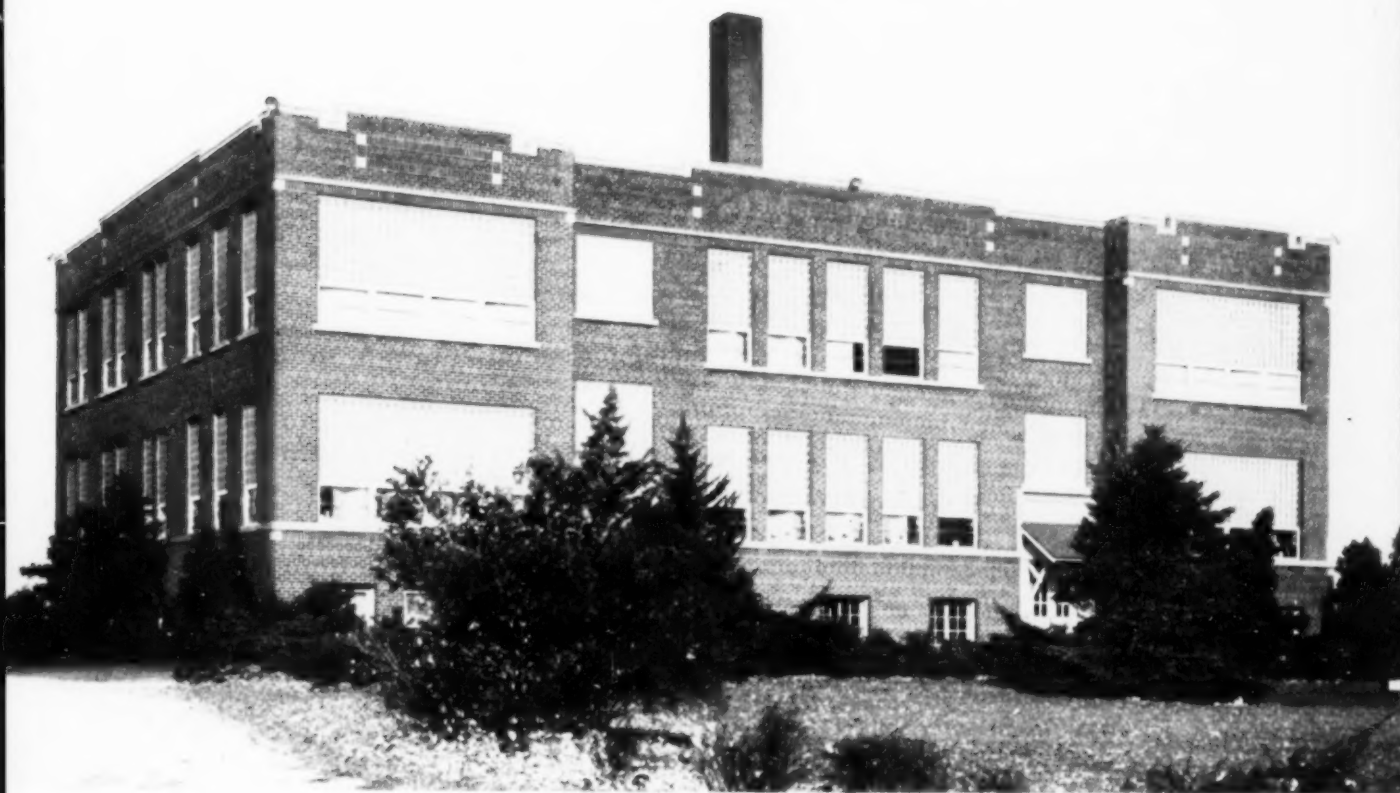
Write for Catalog, Direct Prices & Institutional Discounts

THE Monroe COMPANY
77 CHURCH STREET COLFAX IOWA



Before DAYLIGHT ENGINEERING

(deteriorated sash plus
an annual fuel bill of \$1,839.49)



After DAYLIGHT ENGINEERING

(better light and fuel bill of \$1,268.32)

The York Township School, Clyde, Ohio, is typical of the buildings erected in the 1920's and now faced with maintenance problems. Foremost among this school's problems was what to do about worn-out window sash. Gradually the wooden sash had deteriorated and even continual, expensive maintenance did not provide proper protection from cold wintry blasts.

In 1951, an Insulux Fenestration System using the new Insulux light-directing Glass Block No. 363 was installed. Much of the first

year's fuel savings of \$571.17 was attributed to the new glass block windows!

Important as they are, fuel savings are only part of the story! These panels provide even, diffused daylight over all parts of the school room. Excessive glare and harsh contrasts are eliminated.

By the use of entirely new optical principles, No. 363 light-directing Glass Block capture and properly use daylight from early morning to late afternoon, just as though your building were "turning with the sun."

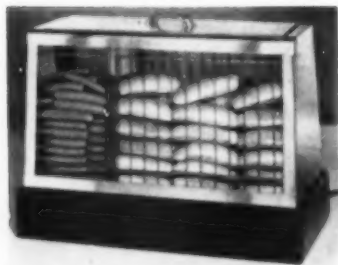
If you are in the process of remodeling old structures or building new ones don't overlook the positive advantages—maintenance economies; better seeing conditions—that panels of Insulux Glass Block® bring. Send for our free, 24-page booklet "Better Light for Our Children." And, for help in planning for, and using, Insulux Fenestration in your school ask for the experienced help of a Daylight Engineer. Write Insulux Glass Block Division, Kimble Glass Company, Dept. CU10, Box 1035, Toledo 1, Ohio.



KIMBLE GLASS COMPANY

Toledo 1, Ohio—Subsidiary of Owens-Illinois Glass Company

What's New . . .



Frankfurter Service Unit

A new machine has been introduced for preparing and serving frankfurters in the lunchroom or cafeteria, at refreshment stands in athletic fields or other outdoor activities, or in special areas. Known as the Frank Bank, the unit holds five dozen buns and ten dozen frankfurters. Service is from the bottom for fast, easy operation. The racks of patented design keep buns and frankfurters from spilling and a special "Freshener Valve" beneath the bun rack is adjustable for the proper amount of steam needed to keep the buns warm and dry. When not in use the Frank Bank is easily stripped for quick, thorough cleaning. It has a thermostatically controlled variable heat selector and is of stainless steel construction with black, baked enamel base. **Manley, Inc., Dept. CUB, 1920 Wyandotte St., Kansas City 8, Mo. (Key No. 550)**

Flooring and Surface Coating

New materials, known as SURCO, have been developed for use as floors, drives, sidewalks, highways, to waterproof, to stucco and plaster walls, and as a concrete where vibration is a problem. The result of more than three years of research and field testing, the products are tough, flexible and water-retardent flooring and surface coating materials which bind to masonry, concrete, plaster, wood, glass and metal. They are similar to regular concretes or plasters but special latex-water emulsion binders instead of water alone are used as the combining agent. Two general types of latex have been developed to meet the varied demands of construction and maintenance. Both are tough and have high adhesive qualities but one has amplified waterproofing qualities and the other accentuated wear resistance.

SURCO can be applied directly and without special preparation to metal decks, stairs, pipe joints and coverings. By the use of colors and marble chips, an ornamental flooring is obtained at relatively low cost. It can be used as a roofing, flashing, putty or caulking compound or as a non-shrinking mortar to set tile, marble, brick or limestone. **Surface Coatings, Inc., Dept. CUB, 110 Pear St., Atlanta, Ga. (Key No. 551)**

(Continued on page 94)

Stanley Banquet Jug

The new Stanley unbreakable Banquet Jug ST3304 is designed for transporting hot or cold liquids in quantity. It has a capacity of five gallons and can be used with food conveyors for carrying beverages, and in cafeterias and lunch rooms.

The jug has a strong, electrically welded stainless steel lining inside a rolled steel shell with aluminum color finish. The wide mouth permits ease of cleaning and a heavy rubber gasket holds the cover rigidly in place. An



adjustable control ring prevents accidental release or loss of contents. **Landers, Frary & Clark, Dept. CUB, New Britain, Conn. (Key No. 552)**



Double Desk, Fawn Oak 830

Arm Chair, Fawn Oak 183

Furniture by HUNTINGTON

—always in good taste

Huntington high quality furniture is specifically designed for long wear and style appeal for every institutional use — lounging areas, sleeping quarters and executive offices. Both the quality and comfort are guaranteed by strict adherence to high standards of manufacturing. Sold through authorized contract dealers. Designs by Jorgen Hansen and Jens Thuesen.

HUNTINGTON CHAIR CORPORATION
HUNTINGTON, WEST VIRGINIA

Permanent Showrooms: Huntington, Chicago and New York

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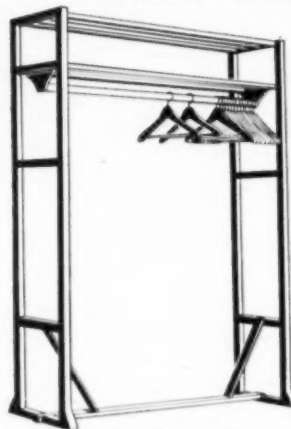
Please mail complete information about Huntington furniture to

Company

City

Attach to your letterhead and mail to Huntington Chair Corporation, Huntington, W. Va.

Checkerette Portable Steel Coat Racks



Set up in a few minutes anywhere, without bolts, nuts or tools, these light, strong rigid racks provide a 4 ft. bar for coat hangers and 2 ventilated hat shelves.

Answers the "wraps problem," for classrooms, school cafeterias, PTA meetings etc. Ideal for shop coats, for drying athletic gear or storing academic robes, band uniforms, etc. (with shelf assembled in top position, bar will take longest garment bags.)

Sturdy, rigid in use, these racks will stand up for years as permanent installations or can be quickly disassembled and stored in small space . . . always available for emergency use. They are strongly built of heavy gauge steel, electrically welded. (When specified—16 double hooks will be provided that snap over hanger bar to accommodate 32 coats or laboratory aprons.)

Write for Circular CT-16



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*"equipped by
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 are everywhere!

They're nation-wide! Scores of colleges call on Hamilton for planning assistance and equipment, when remodelling their laboratories or building new. Performance reports are consistently *cum laude*. Suggesting that you, too—wherever you are, whatever your laboratory project, whatever stage your plans may be in—write to us at once!

Hamilton Manufacturing Company
 TWO RIVERS, WISCONSIN

What's New . . .

Deodorizing Hand Dryer



A new automatic hand dryer has been developed that destroys objectionable odors while providing efficient drying. The Ozonaire employs an especially developed General Electric ozonating system which works constantly, converting oxygen into odor-destroying ozones, thus keeping washroom air fresh and clean without a masking odor. The unit is housed in a streamlined white porcelain and chrome cabinet and operates by pressing the chrome starter button. Hands are completely dried in 18 seconds. The motor turns off automatically at the end of 30 seconds. The nozzle can be turned to dry the face

or body. The dryer is constructed for heavy duty use and trouble-free service. American Dryer Distributing Corp., Dept. CUB, 1324 Locust St., Philadelphia 7, Pa. (Key No. 553)

"Private Line" Systems

A new and complete line of intercommunicating systems has been introduced under the name Connecticut "Private Line" systems. The line of automatic switchboards and telephones is the most complete the company has ever offered and provides facilities for those needing as little as two telephones up to those requiring thousands of telephone lines. A low cost two to five line system for small installations is introduced as the Connecticut Direct A Call which can be installed by a maintenance man.

Both the Private Line and the Direct A Call system have advanced engineering providing many features usually found only in other systems at extra cost. The unique design and construction of the completely automatic systems permits simplified installation and maintenance. Telephones for both systems will be made of super-tough Hercocel molded plastic. Connecticut Telephone & Electric Corp., Dept. CUB, Meriden, Conn. (Key No. 554)

(Continued on page 96)

Wall Bench Table

The Erickson Wall Bench Table is now available in a unit 8 feet long. Benches are attached as part of each unit and fold and unfold with the tables for converting gymnasiums, study halls, classrooms and other areas for varying uses. The unit is designed to hang from the wall when not in use and folds up to within 4 inches of the wall surface. The table may be recessed 6 inches into the wall and enclosed with folding doors, or mounted on an existing wall.

The tables have tan linen Formica tops with anodized aluminum molding permanently fastened to all edges with no exposed screwheads or other fastenings. The tops can be wiped clean with a damp cloth. Benches have rounded edges and are finished in brown ham-



meroid baked enamel, scuff resistant and easily cleaned. Haldeman-Longford Mfg. Co., Dept. CUB, 2584 University Ave., St. Paul 4, Minn. (Key No. 555)



**PRACTICAL
DESIGNING
MEANS
PLUS VALUES**

- Ideal for class or lecture room.
- Large Tablet Arm in natural position.
- Comfortable saddled seat.
- Heavy cast iron base.
- Solid hard maple seat and tablet arm.
- Available with bookrack if required.
- Finished in tough scratch resisting "Celwyn."

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Buying Quality"

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NORTH MANCHESTER, INDIANA

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engineered
color harmony.

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University
Chair

if it's a **WITT**
it's guaranteed

Compare WITT CAN and
PAIL features with others on
these points . . .

STRAIGHT SIDES—
assure extra resistance to
rough handling.

**DEEP ROLLING
CORRUGATIONS**—
run full length of Can adding
further rigidity.

HEAVY GAUGE STEEL—
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ness.

STRUCTURAL STEEL BANDS—
protect top and bottom of Can
and act as shock absorbers.

HOT DIP GALVANIZING—
a hand process after fabrica-
tion, insuring heaviest possible
rustproofing.

PINCH PROOF HANDLES—
for easy handling.

STURDY LID—
snug fitting yet easy to re-
move.



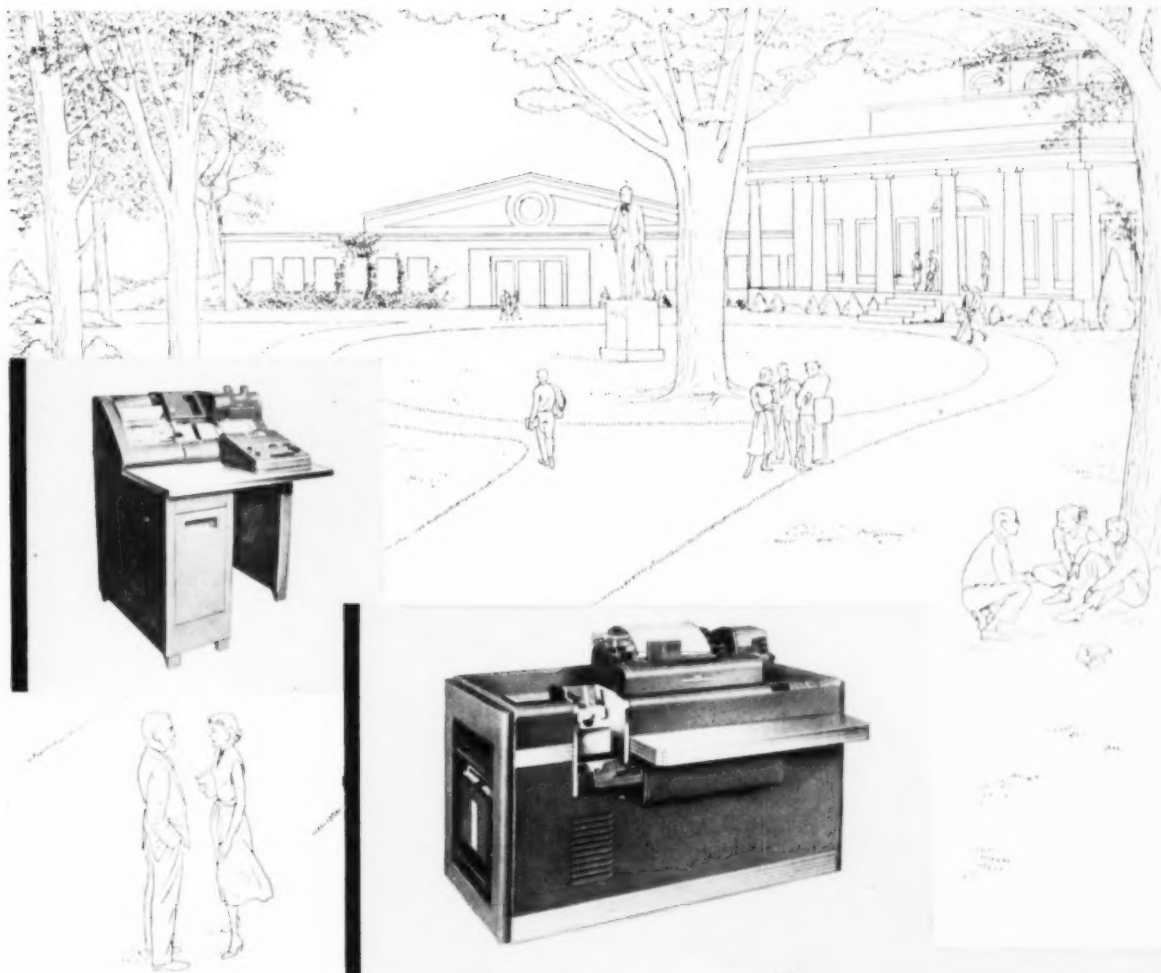
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to outlast 3 to 5 ordinary CANS. That's
your assurance of the highest standards
of workmanship and material. WITT
CANS and PAILS are designed to last
longer . . . constructed to survive the
most severe weather, wear, even
deliberate abuse. It's no wonder that
there are many WITT CANS and PAILS
still in excellent condition after five, ten,
yes even fifteen and more years of service.

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IBM ACCOUNTING

Small college administrative and accounting functions now can be handled with only 3 IBM machines: the new Printing Summary Punch, a Sorter, and an Accounting Machine.

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For full details about this low-cost IBM installation, write to IBM, Dept. CU-4, or call the IBM office nearest you.



INTERNATIONAL BUSINESS MACHINES
500 Madison Avenue, New York 22, N. Y.

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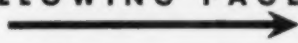
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Klenzade Products Inc.
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Thomas Collators, Inc.
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Brunswick-Balke-Collender Co.
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The Reardon Co.
- 539** Fire Detection Control Panel
Notifier Manufacturing Co.
- 540** GrateLite Ceilings
The Edwin F. Guth Co.
- 541** Pressurized Roach Spray
J. I. Holcomb Mfg. Co.
- 542** Stor-Mor Book Drawers
W. R. Ames Co.
- 543** Kodascope Royal Projector
Eastman Kodak Co.
- 544** Refrigerated Dessert Display
Stainless Food Equipment Co.

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Schieber Sales Co.
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PERMIT NO. 136
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October, 1953

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

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What's New ...

Product Literature

- The complete line of Nabisco individual service varieties available for institutional use is featured in a new booklet issued by National Biscuit Co., 449 W. 14th St., New York 14. Entitled "America's Home Favorites," the brochure shows each variety of the Nabisco institutional line in the newly designed package, together with hints for institutional uses. Information on new products, such as method of packing, cost per serving, count per pound and other facts of interest to buyers, are included. (Key No. 556)

- The importance of selecting the proper filing system to suit the needs is emphasized in two booklets recently released by Remington Rand Inc., 315 Fourth Ave., New York 10. The assistance of filing analysis and installation experts is offered through the Business Services Department of Remington Rand. Folder BSD-2 describes the staff available to help handle peak work loads and Folder LBV-395C.1, "Filing Systems to Fit Your Measure," discusses various kinds of filing systems and their adaptation to varying needs. (Key No. 557)

- Gas and dual-fuel firing for heating, processing and power is discussed in a new 4 page folder, Form 2359, printed in three colors, and issued by Iron Fireman Mfg. Co., 3170 W. 106th St., Cleveland 11, Ohio. The folder discusses the advantages of zone fire control for low start and modulating firing permitted by the Iron Fireman vertical gas burner, ring type burners designed for intermediate and high pressure gas, and the recently announced dual fuel (gas and oil) package unit. (Key No. 558)

- A new booklet on the use of Cramore's Crystals in quantity cooking is now available through Cramore Fruit Products, Inc., Point Pleasant, N. J. Designed to assist in improving, varying or budgeting meals for large numbers of people, the booklet contains recipes compiled by a dietitian and other authorities, featuring citrus fruit flavored dishes. Although the emphasis is on desserts, there are also suggestions for salads, sauces and vegetable dishes and a complete array of beverages. (Key No. 559)

- Color blocks of Vinalux flooring are reproduced in a new folder on "The New Wonder Floor" released by Uvalde Rock Asphalt Co., Frost Bank, Bldg., San Antonio, Texas. The folder gives general information on this vinyl-asbestos flooring which rarely needs hard scrubbing, does not require waxing, gives safe footing and offers cushioned resiliency for added comfort under foot. The line is available in brilliant colors which last the lifetime of the flooring. (Key No. 560)

- "How to Lay a Lifetime Floor of Northern Hard Maple" is the title of a booklet issued by the Maple Flooring Manufacturers Association, 35 E. Wacker Drive, Chicago 1. The new edition of this informative booklet indicates the ease with which hardwood floors can be laid and outlines the steps necessary for the job. Illustrations clarify the text and there are many tips for the amateur to follow. (Key No. 561)

- Four reasons why effective grease interception saves time and money are listed in a new technical guide of the proper sizing and selection of grease interceptors published by the J. A. Zurn Mfg. Co., Erie, Pa. Technical Bulletin 6-52 gives text and detailed charts describing how capacity of grease interceptors is determined. A simple checklist for determining types to be used supplements descriptive text, charts and specifications on Zurn Grease Interceptors. (Key No. 562)

- The complete line of CHF tables manufactured by The Chicago Hardware Foundry Co., North Chicago, Ill., is shown in a new catalog recently issued. Entitled "Tables of Distinction," the catalog is a companion piece to the recent catalog, "Stools of Distinction," issued by the company. Color is used throughout the catalog and indicates the many different color combinations that are possible with the cast iron porcelain enamel bases and the new Sanite color finished columns. In addition to information on the new Flare Design cast construction table base, tables with a variety of metal finishes and pedestal bases, there is a section devoted to sectional tables with seats attached. (Key No. 563)

- A series of "How To" maintenance booklets has been issued by Red Devil Tools, Irvington 11, N. J. The three booklets cover "How to Cut Glass," "How to Fix Broken Windows" and "How to Maintain Wood Floors." Each step in the process described is covered by instructive text with a carefully done illustration of the application. The booklets can be used for classroom instruction as well as for instructive material for maintenance employees. (Key No. 564)

- "Cooking the Modern Way" is the title of a 44 page booklet issued by the Groen Mfg. Co., 4535 W. Armitage Ave., Chicago 39. The booklet is designed to assist those responsible for food services in institutions and reviews established food principles in the light of most recent information on nutrition and cooking methods. It emphasizes the use of steam-jacketed kettles in the production of high quality food in quantities and covers the making of coffee, and cooking of vegetables, meat, poultry, soup, cereal, eggs, fruits and desserts. (Key No. 565)

- The attractive line of Huntington Institutional Furniture is illustrated and described in Catalog No. 104 issued by Huntington Chair Corporation, Huntington, W. Va. Photographs illustrate the furniture, for dormitories and other residence buildings, which is constructed of fine Appalachian oak. (Key No. 566)

- A new line of suspended space heaters for use with any type of gas fuel is discussed in Bulletin No. 543 issued by Dravo Corporation, Heating Dept., 1203 Dravo Bldg., Pittsburgh 22, Pa. The 6 page folder gives complete specification data and full explanations of how the new heaters can be used in applications for heating and ventilating. (Key No. 567)

- Full color illustrations are used to depict the boxes of "Ready-Cut Portion-Control Meats" discussed in the folder released by Colonial Beef Co., 401 N. Franklin St., Philadelphia 23, Pa. Seventeen items in 95 different sizes are shown, together with pictures of the plant, pertinent information on the methods of operation of the company, and prices of the meats per serving and per box. (Key No. 568)

- Schools and colleges teaching ceramics will be interested in the new Catalog and Parts Manual on the Dyna-Kiln recently released by the L and L Manufacturing Co., Chester, Pa. These trouble-free electric kilns for firing ceramic ware are self-contained, practical units, which can be used anywhere in the classroom or shop. There are 37 models for every need and they are constructed for safe, efficient operation. (Key No. 569)

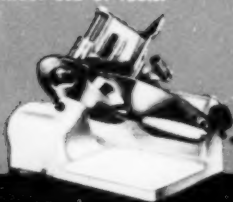
- Designed to clarify the various color designations given by manufacturers is a new Color Classification Chart on Asphalt Tile prepared by the Asphalt Tile Institute, 101 Park Ave., New York 17. The chart has been developed as a guide to show the commercial equivalents of color tones or effects used by manufacturers. (Key No. 570)

- Design and operation of automatic water softeners equipped with pilot operated, diaphragm-type hydraulic valves is described in Bulletin 612 issued by Elgin Softener Corporation, Elgin, Ill. (Key No. 571)

Supplier's News

The F. W. Wakefield Brass Company, Vermilion, Ohio, manufacturer of lighting equipment, announces formation of Wakefield Lighting Limited, with factory and offices in London, Ontario, and sales offices in Toronto. The new plant will serve the Canadian market and will handle production of the Wakefield Grenadier, Star and other Wakefield equipment formerly assembled from Wakefield parts at the Canadian General Electric Co., Ltd.

THREE STYLES—ONE STANDARD. There are 3 Hobart slicers, with manual feed, automatic pressure feed and angle feed. All feature Hobart Stay-Sharp solid stainless concave knife and Hobart advanced safety features. Design is completely free of holes, cracks and crevices where food or juices can lodge—allows instant cleaning without use of tools.



MATCH CAPACITY TO VOLUME. Because there's waste in both under-capacity and over-power, Hobart gives you choice of 9 mixers ranging from the bench-type 5 qt. model to the heavy-duty 140 qt. Model V-1400. All feature Hobart Planetary Action, Plus-Power and Positive Speeds. Full range of attachments to perform work of auxiliary equipment.

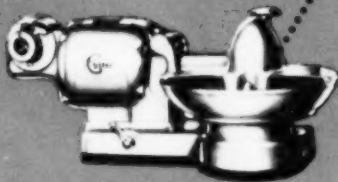


Inside story of a Kitchen Planned for Performance

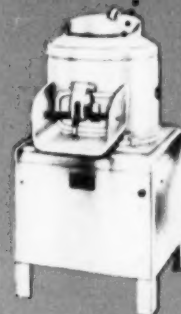
Perfect layout for higher standards and efficient handling! Careful selection of food, kitchen and dishwashing machines in proper sizes for optimum efficiency through exact balancing of volume and capacity! Typical of all-Hobart installations, here's maximum efficiency of output, highest standards, and lower cost per serving. Here's the inside story of every successful operation—and results like this come in all machine sizes. Including yours!



TAKE YOUR CHOICE! Hobart Dishwashers and Glasswashers come in 23 models—fully and semi-automatic—with and without Hobart Time Controls—little (2 ft. square) and big (29 ft. flight-type continuous racking). They're all Hobart designed and made—and there's one or more just right for you.



ALL-ROUND EFFICIENCY IN 2 SIZES. Food utilization is greatly improved by using Hobart Food Cutters to prepare large quantities of ingredients in a matter of seconds—and to make use of ends and left-overs as well. For efficient preparation of all types of food in kitchen and salad pantry, choose Model 84141 with ½ H.P. motor (illustrated) or Model T-215-GA (¾ H.P.) with or without pedestal.



NAME YOUR VEGETABLE VOLUME— choose your peeler. Four models in bench, pedestal and cabinet styles—with capacities of 15 through 33 lbs. meet all sanitary requirements and are Hobart-built to stand up under the most severe service. They peel all shapes and sizes—peel them only skin deep, no flats.



Trademark of Quality for over 55 years

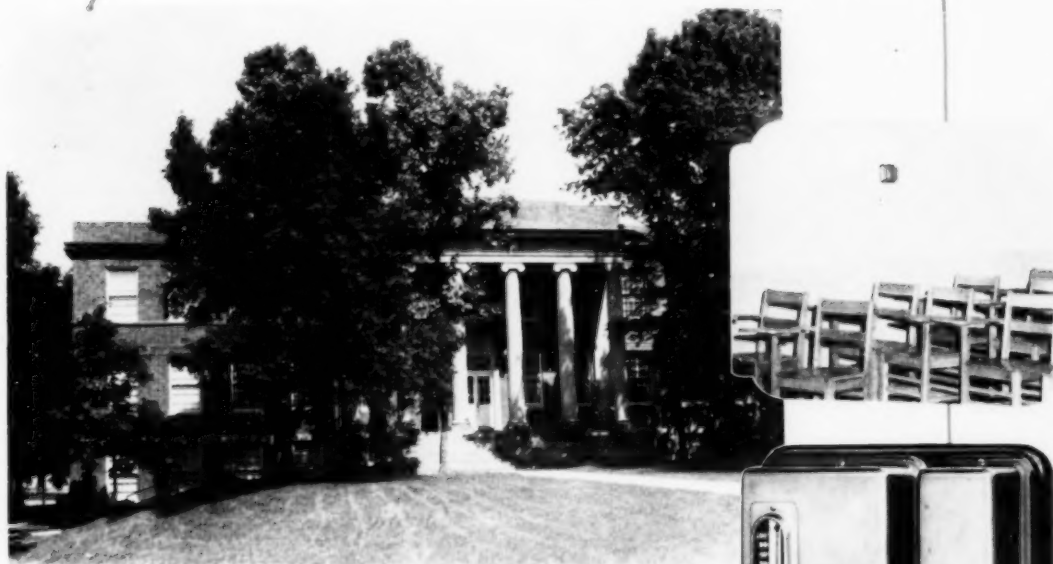
Along with wide choice of models, an all-Hobart installation gives you three more unique advantages: (1) Hobart engineering and proved performance, backed by a guarantee outstanding in the industry for over 55 years; (2) consolidated planning, purchasing and service—as near you as your phone; (3) interchangeability of attachments and accessories. For more complete information, get in touch with our local representation—or our Troy, Ohio, offices, today . . . **The Hobart Manufacturing Company, Troy, Ohio.**

Hobart Food Machines

The World's Largest Manufacturer of
Food, Kitchen and Dishwashing Machines

Another Air Conditioned College Building equipped with

JOHNSON AUTOMATIC TEMPERATURE **CONTROL**



Bruce Ryburn Payne Building, George Peabody College, Nashville, Tenn. Reese and Jackson, architects, Nashville. Newcomb and Boyd, mechanical engineers, Atlanta. Nashville Machine and Supply Co., heating and air conditioning contractors, Nashville.

T-431 Submaster
Heating-Cooling
Thermostat

Designed to accommodate modern classroom activities, the new Bruce Ryburn Payne Building on the George Peabody College campus, at Nashville, is completely air conditioned. And like so many other college buildings, air conditioned or not, it is equipped with Johnson Control. In this case, Johnson Submaster *Heating-Cooling Room* Thermostats, reset from a central point as conditions demand, provide comfort in each classroom at the command of a Johnson Master Controller.

In addition to the *individual room* control, there is a comprehensive system of Johnson apparatus to regulate the temperature of the hot and chilled water supplied to the individual room air conditioning units.

True, *your* buildings may not be air conditioned, but how about efficiency, comfort and fuel savings for the heating and ventilating systems in the buildings on your campus? Johnson Automatic Temperature Control can be installed in any type of building, old or new, on any type of heating system. Johnson "Dual" Thermostats can be adapted easily to existing control equipment to provide "odd-hour" economy in unused rooms. Ask your heating contractor or call a Johnson engineer from a nearby branch office for his recommendations on how you can improve your over-all heating system efficiency. There is no obligation, of course. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities.

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*Automatic Temperature and
Air Conditioning* **CONTROL**